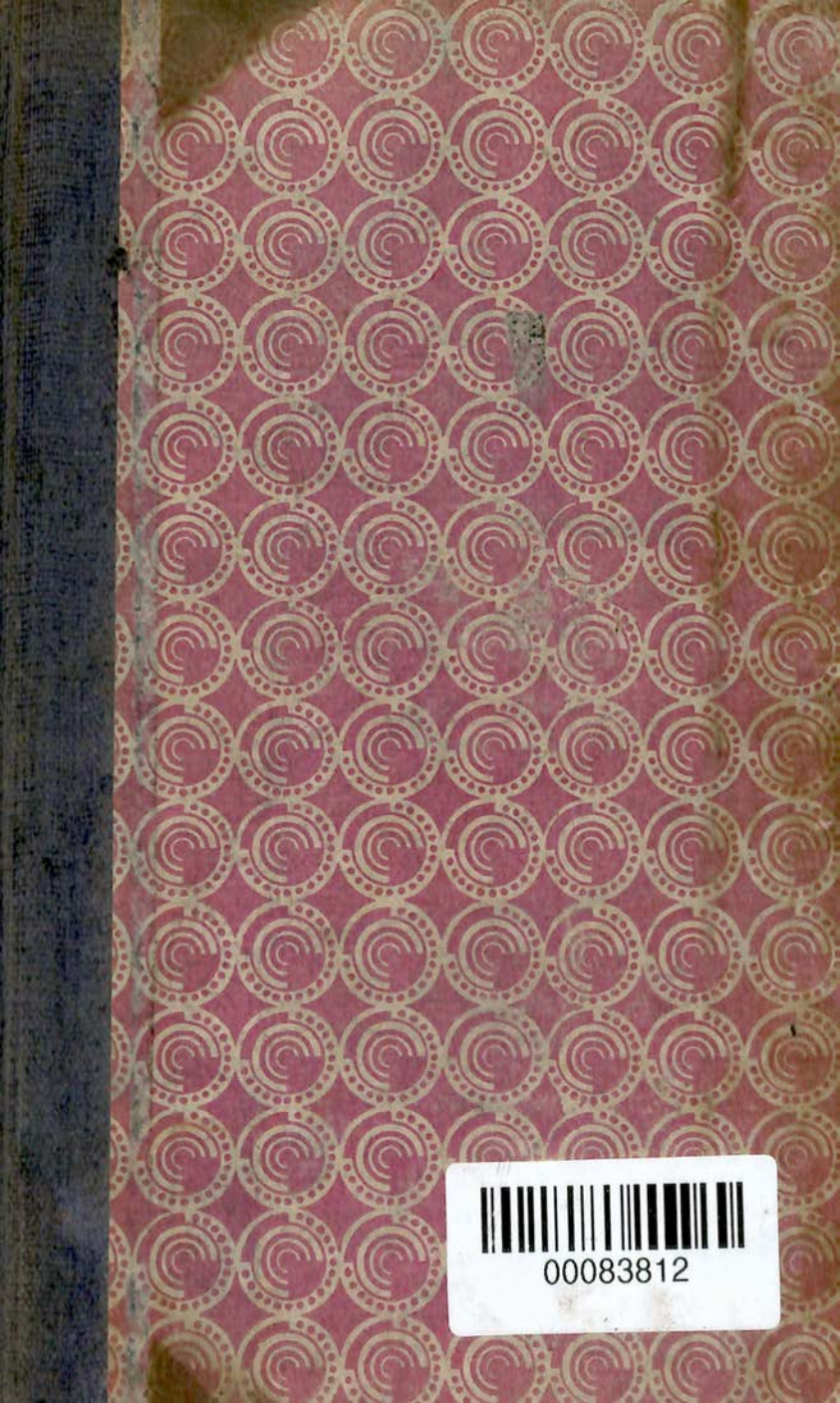
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ACCOUNT

OF

THE ABIPONES,

AN EQUESTRIAN PEOPLE

OF

83812

PARAGUAY.

FROM THE LATIN OF MARTIN DOBRIZHOFFER,

EIGHTEEN YEARS A MISSIONARY IN THAT COUNTRY.

IN THREE VOLUMES.

VOL. I.

LONDON:
JOHN MURRAY, ALBEMARLE STREET.
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tures from his own lips; and she is said to have taken great pleasure in his cheerful and animated conversation.

These notices concerning him have been obtained from one of the last survivors of his celebrated order.

In 1784, he published the work, a translation of which is now laid before the public. The original title is *Historia de Abiponibus, Equestri, Bellicosaque Paraquariæ Natione, locupletata copiosis Barbararum Gentium, Urbium, Fluminum, Ferarum, Amphibiorum, Insectorum, Serpentium præcipuorum, Piscium, Avium, Arborum, Plantarum, aliarumque ejusdem Provinciæ Proprietatum Observationibus; Authore Martino Dobrizhoffer, Presbytero, et per Annos duodeviginti Paraquariæ Missionario.* A German translation, by Professor Kreil of the University of Pest, was published at Vienna in the same year. There is no other work which contains so full, so faithful, and so lively an account of the South American tribes.

His motives for undertaking the work, and his apology for the manner in which it

is executed, may best be given in his own words:—

"In America, I was often interrogated respecting Europe; in Austria, on my return to it, after an absence of eighteen years, I have been frequently questioned concerning America. To relieve others from the trouble of inquiring, myself from that of answering inquiries, at the advice of some persons of distinction, I have applied my mind to writing this little history; an undertaking which, I am aware, will be attended with doubtful success and infinite vexation, in this age, so abundant in Aristarchi, accustomed to commend none but their own, or their friends' productions, and to contemn, as abortive, those of all other persons."

"A seven years' residence in the four colonies of the Abipones has afforded me opportunities of closely observing their manners, customs, superstitions, military discipline, slaughters inflicted and received, political and economical regulations, together with the vicissitudes of the recent colonies; all which I have described with

greater fidelity than elegance, and for the want of this I am surely to be pardoned; for who can expect the graces of Livy, Sallust, Cæsar, Strada, or Maffeus, from one who, for so many years, has had no commerce with the muses, no access to classical literature? Yet in writing of savages, I have taken especial care that no barbarisms should creep into my language. If my sincerity be only acknowledged, I shall have attained my object: for candour was always the most noble ornament of an historian. To record true, and as far as possible well-established facts, has been my chief aim. When you read, I do not ask you to praise or admire, but to believe me; that I think I may justly demand."

"What I have learnt amongst the Paraguayrians in the course of eighteen years, what I have myself beheld in the colonies of the Indians and Spaniards, in frequent and long journeys through woods, mountains, plains, and vast rivers, I have set forth, if not in an eloquent and brilliant narration, certainly in a candid and accurate one, which is at least deserving of

credit. Yet I do not look upon myself as a person incapable of making a mistake, and unwilling to be corrected. Convince me of error and I shall yield, and become as pliable as wax. Yet I advise you to proceed with caution; for you may err in judging as well as I in writing. So far am I from deeming this little work of mine perfect, that before it is printed and published, I intend to correct and polish it. But as I am now fast approaching my six-and-sixtieth year, I dare no longer defer the publication, lest the work should prove a posthumous one. These premises I have thought proper to make. Adieu! friendly reader, whoever you are; and pardon the errors of the press, and of the author likewise: for, *Nihil humanum a me alienum puto.*"

In the course of the work, Dobrizhoffer frequently takes occasion to refute and expose the erroneous statements of other writers respecting the Jesuits in Paraguay, and the malignant calumnies by which the ruin of their institutions in that country was so unhappily effected. It has been

deemed advisable to omit many of these controversial parts, which, though flowing naturally from one who had been an active member of that injured society, must of course be uninteresting in this country, and at these times. In other parts also, the prolixity of an old man, loving to expatiate upon the pursuits and occupations of his best years, has been occasionally compressed. No other liberty has been taken with the translation. The force and liveliness and peculiarity of the original must of necessity lose much, even in the most faithful version. Yet it is hoped, that under this inevitable disadvantage, Dobrizhoffer will still be found one of those authors with whom the reader seems to become personally familiar.

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AN ACCOUNT

OF

THE ABIPONES.

PREFATORY BOOK ON THE STATE OF PARAGUAY.

PARAGUAY is a vast region in South America, extending very widely in every direction. From Brazil to the kingdoms of Peru and Chili, they reckon 700 Spanish leagues: from the mouth of the river La Plata, to the northern region of the Amazons, 1,100. Some reckon more, some fewer leagues, according as they use German, French, or Spanish miles. Concerning this matter, a determinate opinion must not be expected. These huge tracts of land, receding very far from the Colonies, are not yet rightly explored; possibly, never will be.

Geometry is there a *rara avis;* and were any one capable of measuring the land, and desirous of the attempt, he would want the courage to

enter it, deterred either by the fear of savages, or by the difficulties of the journey. Men of our order, seeking out savages for God and the Catholic King, examined the coverts of its forests, the summits of its mountains, and the banks of its remotest rivers, traversing, to the utmost of their ability, every part of the province, always risking, and often losing, their lives. In Peru and Mexico, there is no corner which the Europeans, attracted by the hope of gold, have not searched into; but we are still unacquainted with great part of Paraguay, a region unproductive of gold, and, therefore, wanting the requisite allurement. As for what *is* discovered, who can deny that it is almost entirely owing to the efforts of the Missionaries? The plains which they traversed, the rivers which they crossed, together with the distances of places, they have noted with the utmost fidelity, though not always with equal art.

Paraguay is subject to the King of Spain, in whose authority it is ruled by three governours, and as many bishops. Each province has its governour; the first is that of La Plata, on the banks of which is the city of Buenos-Ayres, the seat of the royal governour, and of a bishop. It is famous for an academy, monasteries for both sexes, a port, and a citadel, which, though

impregnable to the assaults of savages, and even of the citizens themselves, would soon yield to the warlike engines of Europeans; the river compensates for the weakness of the walls, ships being prevented, by shoals, from approaching. It is destitute of a wall, ditch, gates, and similar fortifications; defects common to all the other cities of the province. The inhabitants are reckoned at 40,000, the dwellings at about 3000, constructed chiefly of brick, and roofed with tiles; but they are all low, excepting a few of two stories. The churches are handsome, even to the eye of an European. The finest are two of which Primoli, a Roman lay-brother of our order, and now in repute in his native city, was the architect. There are no public fountains, colossal statues, or images of the Saints in the market-place. You may count more carriages in Austrian Vienna in one street, and in one hour, than you can here, in the whole city, during a whole year. Troops of horse may be seen every moment, nor is it surprising, that even those of moderate estate should, in the Spanish tongue, be called *Cavalleros*. Military rank, the magistracy of the city, and similar dignities, alone confer nobility. The riches of the inhabitants consist rather in cattle, than in money. The land round about the city, for near two

hundred leagues, is a well wooded plain, often destitute of water, but rich in corn and pasturage, the latter of which feeds innumerable herds of cattle, horses, and mules. Wherever you turn you meet droves of wild horses, the property of the first that catches them. Besides willows, in which the islands of the river abound, the peach tree is constantly made use of for fuel.

Buenos-Ayres is one of the principal emporiums of America, merchandise being either brought from Spain, or secretly smuggled from the Portugueze. The more wealthy carry on a lucrative trade with Peru and Chili, in mules and the herb of Paraguay. The climate is moist. Tempests are equally violent at all times of the year, thunder often continuing for whole days and nights; this is common to all parts of Paraguay. Clouds, pregnant with fire and water, terrify, and often destroy, both men and cattle, either with lightning, or hail of an incredible magnitude, the like to which Europe has never seen. The city is situated in S. lat. 34° 36′, and in long. 321° 3′.

On the eastern shore of the river stands Nova Colonia do Sacramento, opposite to Buenos-Ayres, which the Spaniards, as built and fortified by the Portugueze on Spanish ground, have often besieged, and as often restored by treaty; a restoration which the inhabitants of

Buenos-Ayres openly favoured, having in view their profitable traffic with the Portugueze. But the revenue of the Catholic King was grievously affected by the gains of these private individuals, from the diminution of the customary taxes. This little city, the subject of so many disputes, stands on the higher bank of the river. The houses are few and low, forming a village, rather than city, yet it is far from despicable; opulent merchants, wares of every kind, gold, silver, and diamonds are concealed beneath its miserable roofs. Surrounded with a single and very slender wall, though sufficiently stored with military engines, arms, and provisions, for the sudden occasions of war, it yet discovers neither strength nor elegance. The land under Portugueze authority is of such small circumference, that the most inactive person might walk round it in half an hour. Portugueze ships, laden with English and Dutch wares, and Negro slaves, which have a great sale in America, crowd to this port, and the Spanish sentinels, either bribed or deceived, convey the goods to Paraguay, Peru, or Chili. It is incredible how many millions are lost to the Spaniards in this forbidden traffic. Hence it is easy to guess why the Portugueze have ever determined to defend this colony, at all

costs, and the Spaniards, on the other hand, to destroy it.

During my residence of two days, the appearance of the place was such, that I thought it might be taken, in one assault, by a hundred soldiers. But as the fear of war came upon them, I doubt not, that new fortifications were added to the old wall, as the siege cost so much time and trouble to the Spanish General, Pedro Zevallos, a consummate officer, and of known success, who, when he prepared to storm the city, through a breach in the wall, secured as it was with a numerous garrison and military engines, took it conditionally, October 31, 1762. Before the walls were yet repaired, twelve English and Portugueze ships of war arrived there, intending to reduce the Spaniards, then masters of the city. They conducted the affair with much noise, but little success. Chance put an end to the engagement, when it had lasted a few hours. The English Admiral's ship being burnt, the rest fled hastily to the ports of Brazil, the English throwing the blame on the cowardice of the Portugueze, and they in turn accusing the foolhardiness of the English. For the one fought under the very gates, that they might be near to strike home; the other at a distance, lest themselves should

be injured. This they threw in each other's teeth. Transient, however, was the advantage which Paraguay derived from this victory; for peace being ratified between the European powers, the Spaniards restored Nova Colonia to the Portugueze, that they might recover the Havanna, and Manilla, capital of the Philippines, both which places the English had taken from them. After a few years, war was rekindled; and Pedro Zevallos, having conquered the Island of Santa Catharina, took it a second time. Finally, in the last peace concluded between the courts of Madrid and Lisbon, it was ceded to the Spanish. This was a bitter loss to the Portugueze, yet by the accession of new territories, many more inlets were opened to them. Cuyaba, a place rich in gold, Matto Grosso, the little fort of S. Rosa, (called La Estacada,) and other colonies, were added to Portugal. Some think this intimate connection dangerous to Peru, hurtful to the Spaniards, and advantageous only to the Portugueze. For what should hinder the latter, accustomed, as they are, from their infancy, to arms and difficult routes, and never slothful in extending the limits of their kingdom, from going and possessing themselves of the treasures of Potosi, a mountain abounding in silver, but destitute of iron, and of men to wield it?

Some years ago, when I was in Paraguay, a handful of Portugueze defended the little fort of S. Rosa, (La Estacada,) against a numerous army of Spaniards and Indians, enlisted at Potosi, the assailants being shamefully repulsed. About the same time, a very few Portugueze sallied from the same fort, and coming artfully by night, surprised S. Miguel, a Peruvian city, inhabited by Indian Christians, called Moxos. Two Jesuit priests, who had the care of the city, were dragged into captivity; one of them, an old man, fell a victim to the journey, whilst the other was thrown into prison. The Indians, except those who had escaped by flight, were driven out and dispersed, and every thing was rifled. But away with these sad memorials; for we would not tear open the newly seared wound, we would not presage ill for the future. That the happiness and safety of these flourishing estates may be confirmed by a lasting alliance, is the desire and the prophecy of every good man.

Fifty leagues to the south of Nova Colonia, on the same shore, stands Monte-Video, a little city, founded in the year 1726, by D. Bruno Mauritio Zavala, Governour of Buenos-Ayres; and afterwards fortified with a wall, a castle, and, here and there, with tiers of cannon, by the labours of the Guaranies. Besides soldiers

and Guaranies, it contains many men from the Canary islands. On every side the land is fertile in corn, the farms large, and the cattle and horses incredibly numerous. The produce of the farms is a provision for the colonists, and there is daily opportunity of selling cattle and hides for corn: as the ships, which frequently leave this port, need a provision for many months, scarce a single vessel sets sail without a freight of twenty or thirty thousand ox hides for Europe. Grievous it is that so rich a soil should lie open to the devastating savages, who rise up in troops from their coverts, in quest of blood or booty, always creating terror, and often inflicting death. By no arts can they be subdued, by no kindness be won to the friendship and religion of the Spaniards. Fiercer than wild beasts, they have now for two centuries mocked the toil of soldiers and of priests. The latitude of this city is 34° 48′, its longitude 322° 20′.

About thirty leagues from hence lies the gulph of Maldonado, affording a commodious station for ships, even of large burden. Except sentinels, you see nothing here but a few cabins, the abodes of misery. Hard by is an island, the habitation of seals; it lies nearly in the middle of the river, and were the natural rock on which it stands defended by a double tier of

cannon, how would it guard Paraguay against its enemies! For they could not elude the fire of the cannon by taking the east side of the river, unless they preferred being buried in the *Banco Ingles*, or English shoal.

To the government of Buenos-Ayres belong the cities of Santa Fé and Corrientes; the one on the east, and the other on the west shore of the Parana. The former is the handsomest and most opulent. From its trade in divers articles, and from its countless herds of cattle, it amasses wealth to a great amount. In former years, it was almost razed to the ground, and thus reduced to solitude, by the barbarous Abipones, Mocobios, Tobas, and Charruas. The more valuable and remoter estates were entirely destroyed; slaughters were committed, in the very market-place, at mid-day; and it was provided by law, that no one should enter the church, unless armed with a musket. But after we had founded the colonies of S. Xavier, S. Jeronymo, Concepcion, S. Pedro, and S. Pablo, this city began to take breath, and, flourishing again, returned the security it had previously received. Before, behind, and on both sides, it is bounded by rivers, which, when they overflow, threaten destruction to the inhabitants, but are, at other times, extremely beneficial to them.

Its latitude is 31° 46′. From Buenos-Ayres, its distance is reputed to be an hundred leagues.

The other city, which the Spaniards call De las Siete Corrientes, takes its name from seven points of the rock jutting out into the Parana, against which the current breaks with great violence, and flowing on very rapidly, carries down ships, coming up the stream, unless in full sail under a strong wind. A row-boat, in the passage of the river, must make many windings to avoid the rapidity of the current, as I have often experienced: for hard upon the city, the great river Paraguay flows into the still greater river Parana, the one changing its course, and the other its name. For the Parana, rolling on from east to west, when joined to the Paraguay, hurries down in a southerly direction with it. The Paraguay loses its name for that of the Parana after its junction with that river. It is inconceivable with what a mass of water these conjoint streams roll proudly down in one mighty channel. If you did not see the banks, you might fancy it a sea. This place, in name alone a city, and unworthy of the name, is chiefly composed of mud-hovels, with roofs of palm-leaves. The inhabitants are remarkable for their beauty, fascinated by which, many of the Europeans are entangled in marriages, which they repent

for the rest of their lives. The women destroy themselves with labour, weaving, and exquisitely embroidering garments, which they call ponchos. The men are naturally agile, lively, and expert in horsemanship; but, from their indolence and love of ease, are oppressed with poverty, when they might abound in every thing, if they but knew how to improve the fertility of the soil, and the advantages of the river. The Abipones, who had long afflicted the neighbourhood with slaughter and rapine, being at length subdued, and settled in the new colony of St. Ferdinand, the inhabitants revived after they had entertained thoughts of deserting the city, and the use of the fields and woods, on the other side of the river, was restored them. These last, being stocked with noble trees, afford excellent materials for building ships and waggons. The fields supply pasturage for cattle of various kinds. The inhabitants derive considerable profits from these sources; gains which the daily fear of assailing savages deprived them of. The lat. of the city is 27° 43′, its long. 318° 57′.

In the jurisdiction of the Governour of Buenos-Ayres, are also thirty Guarany towns, on or near the banks of the Parana, the Uruguay, and the Paraguay. By geographers they are called Doctrines, or the land of Missions; but the ignorant or malicious style them, in their books,

the kingdom of the Jesuits, a republic rebellious to the Catholic King, painting them in the blackest colours which envy and unbridled calumny can suggest. Let me be excused, if to manifest the falsehood of their calumnies, I mention the following facts:—That the Jesuit missionaries have ever left Europe at the expense of the Catholic King, for the purpose of founding new colonies, and preserving the old;—that they are supported by an annual stipend from the royal purse—that the Guaranies pay yearly tribute to the King—that a century before as many thousands as were appointed, fought in the royal camps without any stipend, whenever they were called upon by the royal governour—that the parishes are visited by the Bishops as often as seems good—that the Bishops are honourably received, and splendidly entertained, it may be for many weeks—that the castles of Buenos-Ayres and Monte-Video were built under the direction, indeed, of the Spaniards, but by the labour of the Guaranies—that the royal army consists chiefly of the Guaranies, under our authority, which were ruled by a few Spaniards, as the body by the soul, in every undertaking against the warlike savages, against the Portugueze and their town of Nova Colonia, so often attacked and taken, or against the insurgents of the city

of Concepcion. The Guaranies were governed by the Jesuits, to whose care they were intrusted by the Catholic kings, not as slaves by their masters, but as children by their parents; and these towns were conducted in a manner precisely conformable to the royal laws.

By the labours of nearly two centuries, the Guaranies, formerly wandering cannibals and obstinate enemies to the Spaniards, have been reduced to civilization, to religion, and to the sceptre of the Catholic King. With what labour, what expense of lives the Jesuits have effected this—how infinitely these thirty towns surpass the other American tribes in the number of their inhabitants, in Christian morality, in the splendour of their churches, in their prompt loyalty, in mechanical skill, in arts, and in military activity, you may learn from the letters every where published of the kings, the royal governours, and the Spanish bishops; from the works of Doctor D. Francisco Xarque, Dean of Albarrazin, an eye-witness, of the learned Abbot Antonio Muratori, and an anonymous Englishman, whose book was translated from English into German, at Hamburgh, in the year 1768. This work gave me great pleasure, though it sometimes made me smile, especially where the author says, "We Europeans doat when we blame the Jesuits of Paraguay.

It were better to deliberate how we may bring about in Europe, what they effect among the Guarany Indians without violence and without money. In their towns, each labours for all, and all for each. Without needing to buy or sell, every one possesses the necessaries of a comfortable subsistence, victuals, lodging, medicine, and education. Money wanting, all is wanting, say the Europeans; the Guaranies, on the other hand, though destitute of gold and silver, though unacquainted with any kind of money, daily experience the truth of the aphorism, *Dii laboribus omnia vendunt*, God gives every thing to labour. Proportioning the task to their age, their sex, and their strength, they are always employed, never oppressed with labour. Of luxuries they are ignorant, superfluity they know not, yet are happier in their contentment than the wealthiest in their opulence. He is not prosperous to whom much abounds, but whom little suffices. The Jesuit priests are curates not of the souls, but of the bodies of the Guaranies." Being in subjection only to the Catholic King and the royal governours, not in dreaded slavery amongst private Spaniards, like the other Indians, the towns increase wonderfully every year in population under our care, and fresh towns were now and then added to the old ones. In the year 1732, 141,252 inha-

bitants were reckoned in the thirty colonies of the Guaranies; but the small-pox breaking out soon after, cut off thirty thousand of them. Some time after it returned again, but in a milder form, and eleven thousand only were its victims. The measles, likewise, so fatal to Americans, made repeated ravages to a frightful extent. I write from experience in both, for in my office of priest, I attended the sick of the small-pox and measles, day and night, for many months. Famine, also, arising from the continued drought and consequent density of the land, filled the tombs with Guaranies. Add to these, the victims of war in the royal camps, where five, and sometimes six thousand men were detained. In 1767, when we bade America farewell, there were about an hundred thousand numbered in these towns. M. Louis Antoine de Bougainville, in his work entitled *Voyage autour du Monde*, printed at Neufchatel, in the year 1772, must be read with caution. He loads the Jesuits with egregious praises, but by and bye relates a thousand things as contrary to truth as dishonourable to us and the Guarany colonies. *Pessimum inimicorum genus laudantes*, says Tacitus, in the life of Agricola. I would not, however, willingly believe that an author, the distinguished favourite of Mars, of Neptune, and, unless I am deceived, of all the

Muses, is to be classed with these knaves! True it is, he wrote falsely concerning us and the Guaranies; but rather deceived by the narrations of others, than through envy or malice. He never even saw the Guarany towns from a distance. I wish he had seen them! he would have painted the Indians and their missionaries in fairer colours. A little while, and but a little while, he remained in Buenos-Ayres, the port and threshold of Paraguay. There he drew the very worst notions, from the very worst sources, and gave them to Europe as the undoubted truth. Alas! alas! the friendliest well-wisher could not then, without danger, advocate our cause. The rising, not the setting sun is praised by the multitude, and such was then our fate. A Spaniard of no despicable authority has opened his mind in these words: "If every thing else which M. de Bougainville has written on the other provinces be as false as what he has said concerning Paraguay, let his history be carried to the spice shop to wrap pepper; yea, to a meaner office."

As for Paraguay being the kingdom of the Jesuits, it is the dream—the stupid fiction of Bernardo Ybañez, a Spaniard, twice expelled from our society. It would be endless to mention all whose vile detractions have calumniated the towns and the missionaries of the Guara-

nies. To refute them, I oppose the histories of Father Nicolas del Techo; *La Conquista Espiritual* of Father Antonio Ruiz de Montoya; the history of Father Pedro de Lozano; the familiar epistles of Father Antonio Sepp to his brother; the French original of Father Francis Xavier Charlevoix, (for the German translation is wretchedly mutilated and corrupted); the annual accounts of Paraguay, printed at Rome; and the letters of Philip the Fifth—his two epistles to the Jesuit missionaries of Paraguay, dated from the palace of Buen-retiro, the 28th of December, 1743; the letter, printed with them, of the illustrious Joseph de Peralta, bishop of Buenos-Ayres, in which, himself an eye-witness, he acquaints the same Philip with the state of the Guarany colonies. These important documents translated into Latin, and published in 1745, are every where on sale:—from a perusal of them you may learn, that the Guaranies are not only obedient to the Catholic King, but especially prompt in their repulsion of his enemies, exceeding the other American nations in the extent of their services. The sedition of the Guaranies dwelling near the banks of the Uruguay, may perhaps be objected; but what was the cause? Exasperation against the royal decrees, which delivered up seven of the finest towns of Paraguay to the Portugueze,

and obliged thirty thousand of their inhabitants to migrate into solitude, or seek a precarious livelihood among the other colonies. Long and vigorously did the Indians oppose the mandate, not through hatred of the king, but love of their country. What! do we think the Spaniards, French, or Germans would act otherwise, if compelled by the command of their sovereigns to relinquish their native land to enemies? For dear to every one is his country; particularly so to the Americans. Hence, though no one can approve the repugnance of the Indians of the Uruguay, who does not think it, in some measure, worthy of excuse and pardon? They erred in understanding, rather than in will; for their loyalty to the Catholic King was sound and lively. No eloquence of the missionaries could induce them to believe themselves condemned by their good king, to a perpetual and miserable exile from their native soil, in favour of the Portugueze, their enemies. "In nothing," (said they in their letters to Joseph Andonaegui, the royal governour,) "in nothing have we or our ancestors sinned against our monarch—never have we injured the Spanish colonies: how then shall we, unoffending subjects, believe ourselves sentenced to exile by the will of our gracious sovereign? Our grandfathers, great grandfathers, and in like manner all our bro-

thers have frequently fought under the royal banners against the Portugueze—frequently against the armies of the savages. Who shall count the number of those our countrymen who have fallen in battle, or in the repeated sieges of Colonia? We, the survivors, still bear about us scars, monuments of our loyalty and courage. To extend the limits of the Spanish domains, to defend them against invaders, has ever been our first desire; nor have we spared our lives in its accomplishment. Would the Catholic King have these our deserts repaid with the most grievous punishments—with the loss of our country, our handsome churches, our houses, fields, and spacious farms? It exceeds belief. But if this be really true, what can we ever deem incredible? In the letters of Philip the Fifth, (which were read to us at his command, from the pulpits of our churches,) we were instructed never to allow the Portugueze to approach our territories—that they and theirs were our bitterest enemies. Now they cry out to us, day and night, that the monarch wills our ceding to the Portugueze those noble, those spacious tracts of land, which nature, which God, which the Spanish sovereign himself had yielded us; and which we have cultivated for upwards of a century with the sweat of our brows. Who shall persuade us that Ferdinand, so dutiful a

son, will command what Philip, his excellent father, had so often forbidden? But if, indeed, these enmities be changed into friendship, (for both times and disposition do often change,) and the Spaniards be desirous of gratifying the Portugueze, let them grant them the spacious plains void of inhabitants and of colonies, with our free leave. What! shall we give up our towns to the Portugueze, by whose ancestors so many thousands of our countrymen have been either slain, or forced into cruel slavery in Brazil?—We can neither suffer nor believe it. When, embracing Christianity, we swore allegiance to God and the Catholic King, the priests and royal governours with one voice promised us the friendship and protection of the king: now, though guilty of no crime, and deserving every good return for our services, we are constrained to expatriate, a punishment most grievous, and almost intolerable. What man in his senses will believe the faith of the Spaniards, so versatile in the performance of promises—their friendship so slippery and unsound?" To this effect wrote the Indian chiefs to the royal governour, who, being a well-wisher both to the king and the Indians, when he saw their letter, could hardly refrain from tears; but suppressing pity through military obedience, he never ceased urging the execution of

the royal decree to the utmost of his power, and threatening those who refused to obey it with all extremities.

There were, (who could believe it?) among the herd of Spaniards, men of so hardened a conscience as to whisper in the ears of the Indians, that the king had never enjoined the delivery of their towns, but that the Jesuits had sold them to the Portugueze. Such convincing proofs, however, had the fathers given of their good-will towards the Guaraniés, that the pestilent falsehood never gained credit; some suspicions, however, were engrafted in the minds of the least wise. Many of the missionaries, who urged the migration with more fervour than prudence, had nearly been slain by the Indians in the phrenzy of their patriotism. Father Bernardo Nusdorfer, superior, as it is called, of the Guarany towns, and conspicuous for the magistracies he had held, for his venerable age, his thorough knowledge of the Indian tongue, and lastly, for his authority and favour with the people, visited the seven cities, exhorted them again and again, with every kind of argument, to respect the injunction of the Catholic King, and thought he had prevailed; but as the Indians are of a versatile and unsteady disposition, when the time for executing the decree arrived, unmindful alike of their pro-

mises and intentions they would not endure even the mention of the migration. When the Jesuit, Father Ludovico Altamirano, was sent in the king's name from Spain to Portugal, to hasten the delivery of the towns, the Indians would not acknowledge him as a Jesuit or a Spaniard, because they saw him differ in dress and diet. They even dared to pronounce him a Portugueze disguised in the habit of our order. Terrified at a report that the Indians were approaching him in the city of St. Thomas, he consulted his safety by flying in the night, and soon after I found him, to my great amusement, in the city of Santa Fé, out of danger, and hastening to the Abiponian colonies. Had the Indians shown as much alacrity in yielding to our admonitions, as the Jesuits evinced in endeavouring to inculcate obedience into their wavering minds, the business would have been happily effected without disturbance or delay; but we seldom gained attention, much less compliance. The public supplications in the market-place, undertaken for the purpose of persuading their minds, in which a priest of our order, crowned with thorns, in a mournful voice exhorted the by-standers, with threats and groans, to proceed with the emigration; these supplications had so good an effect, that the major part promised conformity: nor did the

matter end in words. A journey was undertaken by the missionaries the next day, to mark out the limits of the new towns; but the remembrance of their birth-place soon after recurring, it was broken off.

Meantime, it being reported that Gomez Freyre de Andrade, governour of Rio de Janeiro, in Brazil, and the author of all these calamities, had entered their territories with his forces, to arms was the immediate cry, and each being forced along by the common impulse, the united body rolled onwards like a mighty river; you would have thought there was a second Hannibal at the gates. Thus, while the Guaranies repelled force by force, in defence of their churches and fire-sides, they are proclaimed rebels—worthier, in fact, of pity than of punishment; for maddened by their rooted hatred of the Portugueze and the love of their country, they were hurried blindly on wherever their passions impelled them. To shake off the Spanish yoke—to injure the neighbouring colonies of the Spaniards, never so much as entered their thoughts: their ancient love towards their monarch still burnt in their breasts, but it was not powerful enough to extinguish the innate love of their country.

Who, then, can wonder that the weak-minded Indian left no stone unturned, to avoid his ex-

pulsion from a land he could not fail to love,—a land pleasant in its situation, salubrious in its climate, wide in extent, the envy of the Spanish cities for its churches and other edifices, adorned with woods, with rivers, and with plains of the greatest fertility, and lastly, well stored with all the necessaries of subsistence? Joachim de la Viana, governor of Monte-Video, sent forward with a detachment of cavalry to explore the country, having leaped from his horse on the summit of an eminence, and examined through a telescope the city of S. Miguel, (a place inhabited by seven thousand Indians, and famous for its magnificent churches and famous row of buildings,) in his astonishment at the size of the place, exclaimed to the horsemen about him,—"Surely our people at Madrid are out of their senses, to deliver up to Portugal this town, which is second to none in Paraguay." This he said, though a strenuous favourer of the Portugueze, whose party he embraced to ingratiate himself with Barbara, Queen of Spain. The six other towns—those of S. Juan, S. Lewis, S. Nicholas, S. Borgia, and S. Lawrence, were also eminent for the number of their inhabitants and the beauty of their churches, though neither of them was fortified with wall, ditch, palisadoes, or even a gate.

To defend these, the inhabitants of the Uruguay assembled on all sides. Rude and undisciplined, and without a general even tolerably versed in military knowledge, they entered the unequal lists, the ridicule rather than the terror of an European army. No time, no place was left them undisturbed by fear and anxiety, as often as they were assailed by the equestrian spearmen. This was repeatedly mentioned in Gomez Freyre's journals, addressed to the Portugueze commissioners of the demarcation. On both sides the war consisted of long marches and skirmishes, attended with various success; and thus it ended, more noise having been made by both parties than blood spilt. This, however, is agreed on all hands—that the Europeans could never have penetrated to these seven towns, had all the Guarany towns come to the aid of the Uruguayans. But those who dwelt on the banks of the Parana were happily restrained from leaguing with the insurgents, by the exertions of the Jesuits. Judge from this what opinion must be formed by those who have impudently stigmatized us as the authors of the sedition, and the leaders of the rebels. Their books are as many as they are dangerous: for although they allege nothing but falsehoods, yet, with specious arguments, and pretended testimony, they seek to extort that credit which

would be exploded by all Europe, were the characters of their witnesses as well known to others as to ourselves.

And now, gentle reader, a word in your ear! If the Guarany insurgents were indeed encouraged by the Jesuits, could they not have effected more against the royal forces? Destitute of the counsels and presence of the Fathers, they did their business stupidly and unprosperously; a circumstance mightily advantageous, both to the Spaniards and Portugueze, whose victory was owing to the bungling management of their opponents. About the beginning of the disturbances, one Joseph, Corregidor of S. Miguel, was elected general of their forces against the Portugueze. This Joseph, an active and courageous man, behaved like a good soldier but an execrable general, for he was as ignorant of military tactics as I am of the black art. On his falling in a chance skirmish, Nicholas Neengirù, many years Corregidor of the city of Concepçion, succeeded. Under his conduct the war was poorly carried on; and the affairs of the Uruguayans gradually declining, the seven towns were delivered up to the royal forces. But, reader, when you utter the name of Nicholas Neengirù, uncover your head and bend your knee, or rather, if you know all, burst into laughter. This is that celebrated Nicholas

Neengirù whom the Europeans called King of Paraguay, whilst Paraguay itself had not an inkling of the matter. At the very time when the feigned majesty of the King of Paraguay employed every mouth and press in Europe, I saw this Nicholas Neengirù, with naked feet, and garments after the Indian fashion, sometimes driving cattle before the shambles, sometimes chopping wood in the market-place; and when I considered him and his occupation, could hardly refrain from laughter.

But mark the progress of King Nicholas's fate. To obtain for the base fiction an appearance of truth, a person in the kingdom of Quito was bribed to get money coined and stamped with the name of King Nicholas. This base money was issued both in Europe and America, and no one could doubt its being coined in Paraguay by the pretended king, where, from the want of bullion, the Catholic kings themselves had no mint. The deceit however at length appeared; on March the 20th, 1760, the artificer of the coin wrote a letter to the King, in which he confessed—"that he was compelled by the secret stings of conscience to divulge his crime," &c. This letter detected the venal wretch who instigated him to coin the money of King Nicholas.

The fame of King Nicholas and the money issued in his name gave reasonable apprehension to the Court of Madrid; but Pedro Zevallos, who was sent with an army to reclaim Paraguay, soon perceived that it was all a false alarm, and declared the same in letters to the king. If any one doubt my veracity, let him examine the Madrid newspapers, published in the October of 1768, where he will find these words:—"Whatever has been rumoured of King Nicholas is certified to be a fabulous invention." If you require yet stronger evidence, attend to what follows. The tumults in the Uruguay being settled, Nicholas went himself to the Spanish camp, and appearing, of his own accord, before the royal governour, Joseph Andonaegui, gave him an account of all his proceedings. He was quietly heard, dismissed unpunished, and continued in his office of Corregidor. Had he been even suspected of affecting the crown of Paraguay, how different would have been his treatment! Loaded with fetters,—locked in a horrible dungeon,—he would have expiated his crime by some fearful punishment, and perhaps been torn limb from limb. But let us trace the story to its source.

It is a trite proverb in Spain—*La mentira es hija de algo*, falsehood is the daughter of something. Those pernicious rumours which spread

far and wide, like a pestilence, generally originate in some trifle of no consequence. Such was the fable of King Nicholas, which sprang from an ignorance of the Guarany language, was perpetuated by malice, and spread over all the world. *Tubicha* signifies *great* among the Guaranies; and *Mburubicha*, King or Cacique. Among the companies of Indians sent to plough the land, to cut and carry wood, or to ferry on the river, there is always a chief, who directs their motions, and whom they address by the title of *Ñanderubicha*, our chief or captain. In this manner the Uruguayan Indians called their leader, Nicholas Neengirù, *Ñanderubicha*, our captain; which, being heard by the Spaniards of Asumpcion, who speak a confused jargon of Spanish and Guarany, they ignorantly and wickedly asserted that the Indians called Nicholas their king. I must not here omit to mention, that, from the ignorance of the Spanish and Portugueze interpreters, the most unfavourable opinions of our affairs and the most execrable calumnies have often arisen. These men, from their ignorance of Latin and Guarany, have frequently misinterpreted our letters to governors, acquainted with Spanish only; so that deeds and expressions, entirely innocent, have been construed into crimes.

Let us now return to Nicholas, whom error

and malice have gifted with an imaginary sceptre. He was born in the city of Concepçion; his ancestors were Guarany Indians, and he had married, many years before, a Guarany woman in the city of Concepçion, where also he had held many and various offices. Father Ignatius Zierhaim boasts that this celebrated Nicholas, monarch of Paraguay, was publicly whipped, when a young man, by his orders, himself being vicar of the place. Nicholas was a tall man, with a good countenance, but grave and taciturn; his face was good-looking, though marked with a large scar. Think then how ridiculously fable must have been added to fable, when this Nicholas was made out a lay-brother of our order. Only five of this description were with us at that time, whereof two were physicians, the third had the charge of providing apparel, the fourth was employed in painting churches, and the fifth was a feeble old man, whose maladies exercised our patience and his own. None of them bore the christian or sur-name of Nicholas, and they were all Europeans. Persons of Indian extraction were never adopted into the number of priests or brothers. The Indians are none of the wisest, I own, but they are not such idiots as to crown a layman in preference to the priests, whose dignity and wisdom they

rank so high, if the madness of choosing their own king *had* possessed them. Allowing the Jesuits, in a fit of insanity, to have aimed at the sovereign power, they would not have elected an uneducated layman, but some priest of distinguished virtue and prudence. An anonymous Frenchman, in a book intitled, *Nouvelles Pièces intéressantes et nécessaires*, says, page 18, "I will now show you the origin of Nicholas, King of Paraguay, being supposed a lay-brother. Some Spanish countrymen happened, in the course of conversation, to mention the late insurrection on the banks of the Uruguay. "Verily," says one, "if the Jesuits be wise, they "will put the government of the Indians into "the hands of Joseph Fernandez, a lay-brother "of theirs." This Joseph was a native of Spain, formerly lieutenant of some light-armed cavalry of the king's, and a man of great military science. We never find a story lose by carrying. The vain supposition of putting the Indians under the conduct of this lay-brother was reported in such a manner that what one said *should be* done, another said *was* done, and the rest giving implicit credit to their asseverations, a prodigious tale grew out of nothing. This Joseph Fernandez, during the disturbances of the Uruguay, was master of the public school at Tucuman, and necessarily remarked

by the whole of this populous town, if he intermitted his attendance for a single day. Having held the office of school-master many years, he managed an estate in the neighbourhood of the city, and so diligent was he in the exercise of his calling, that I could swear to his never having seen the land of the Guaranies of which he was reported King.

To corroborate my account I shall subjoin a few circumstances relative to this affair. From the seven towns which were garrisoned on their surrender by the Spaniards, upwards of thirty thousand Indians departed. Among all who witnessed these innocent exiles, their tender infants, and their feeble old men, not one but shed a tear of compassion. Fifteen thousand of the emigrants were received by the towns of the Parana, and lodged in hovels of straw,—they whose former homes had been of stone, well-built, and commodious. Nearly the same number were dispersed over the plains of the Uruguay, where numerous herds of cattle supplied the means of subsistence. The towns at length evacuated, were offered by the Spanish Governour to the Portugueze, but not accepted. Amongst other ways of accounting for this refusal on the part of the Portugueze, it was reported, that, after exploring the lands of the Uruguay, they found them destitute of the gold and

silver they expected to find there. At this crisis of affairs died Barbara, Queen of Spain, a Portugueze by birth, and through an overweening attachment to her own country, a strenuous advocate for the exchange of lands in Paraguay. Not long after, Ferdinand the Sixth followed his consort to the tomb. Charles the Third succeeded his brother in right of inheritance. Whilst King of the Two Sicilies, he had disapproved these treaties which settled the exchange of lands in America with Portugal; and on his succeeding to the throne, he utterly abrogated them, as fraught with danger to the monarchy. He restored the Guarany exiles to their towns, which now, alas! resembled Jerusalem after the return of the Jews from Babylon. They found their farms drained of cattle, their fields overrun with brambles and insects, their houses either burnt or miserably dilapidated; nay, they were sometimes terror-struck by the dens of tigers and the holes of serpents! Charles confirmed the Jesuits in their old administration of the Guarany colonies, of which the Portugueze party itself did not wish their utter deprivation. Had the King believed us the fomenters of the late war he would not have committed the Guaranies to our care and fidelity. About the same time, Zeno, Marquis de la Ensenada, was recalled from banishment to

Madrid by the royal letters. This principal court minister had never admitted the exchange of lands agreed upon with the Portugueze, but had transmitted notices of it to Charles then King of Sicily. For this, if we may credit a report prevalent in Spain, the Marquis de la Ensenada was banished. That was not the happy time when you might think as you chose, and speak what you thought.

King Charles not only refused to acquiesce in the treaties ratified with the Portugueze, but immediately declared war upon that people; to the carrying on of which six thousand Guaranies strenuously applied themselves in the royal camp, under the conduct of Pedro Zevallos, who having occupied Colonia, carried his victorious arms into Brazil; but being stopped by the news of peace having been restored in Europe, testified in his letters to the King, that the success of his expeditions was greatly owing to the Guaranies. Suffer me, by way of episode, to draw a rude sketch of the immortal hero Zevallos. His father, the descendant of a noble family in Spain, was royal governour in the Canaries, and died in an insurrection, bravely fighting for the crown. The son, Pedro Zevallos, was handsome, tall, and well made, and the comeliness of his person was set off by the elegance and suavity of his manners. Courteous

among his friends, and authoritative with his soldiers, he was neither ruffled with anger, nor soured with harshness. At every place and time he maintained the character of the pious Christian, the consummate general, the equitable judge, and, if need required, the dauntless soldier. During his leisure hours you might see him praying on his knees in the church for two hours together. Such was the innocence and integrity of his life, that envy, argus-eyed as she is, could never detect a stain to reprobate. So exemplary was his conduct, that the soldier and the christian never jarred, but harmonized together in one beautiful concord. The victories which have gained the Spanish hero the plaudits of his country, are rather to be attributed to his piety, than to his military skill;—to that heaven by which his undertakings were constantly favoured, and his slender resources rendered sufficient. In the keenness of his wit, the sagacity of his judgment, the courage and alertness of his mind, and the soundness of his loyalty, if one man ever excelled another, *he* excelled. His steadfast aim was to benefit rather than please his sovereign, and both he effected, though more than once disgraced from the royal favour by the artifices of calumny. He did nothing without much previous consideration. To crown his purposes

with success, he was master of the most admirable devices; was never at a loss to remove obstacles,—to anticipate dangers,—and either elude them by artifice, or overcome them by force. He never charged the future with the present business—never let slip a good opportunity: did nothing from impulse, every thing from reason; yet though never headstrong in attempting any thing, or hasty in attacking an enemy, in battles and sieges he was fierce and determined. Neither dejected by adverse nor inflated by prosperous circumstances, he always preserved an equal mind. By kindness and good example, he bound his soldiers to a prompt obedience; and this I conclude was the cause of his doing so much with such scanty resources. He was not content to have given his orders, he would himself overlook their execution. On the eve of an expedition, he used to inspect the waggons, carefully enquiring whether they were stored with the requisite arms and provisions, and if they were properly guarded. Rarely trusting to vague reports and uncertain answers, he examined every thing, as far as he was able, in his own person. Early in the night he inspected the different stations of horse-guards, regardless of sleep, as indeed he was of every other indulgence. He

used to say, that vigilance in the general, and obedience in the men, were the safeguards of the army, and the parent of victory, a maxim most happily demonstrated in his own person.

Think not that such egregious merits went unrewarded by royalty: he was honoured with the rank of commendador in the equestrian order of St. Iago, made knight of the order of St. Janeiro, and even created military governor of Madrid. Some years after, he received from King Charles the golden key, a mark of singular prerogative in the court. Rumours of the Paraguay disturbances having reached Spain, he was invested with the government of Buenos-Ayres, and commanded to sail thither, to compose the minds of the Guaranies, and forward the delivery of the seven towns, accompanied by five hundred regular cavalry-men, chosen from every regiment of light-armed horse which Spain possesses. To these were added seven companies of foot, consisting of runaway Germans, French, Italians, Poles, and even Russians, collected, a few years before, by a Spanish lieutenant at the surrender of Parma. Most of these were veterans—fierce warriors, fresh from European battles. As often, therefore, as Paraguay found them an enemy, they did not let their help be wanted; but being used to running away at home, they did not

forget their old propensities amongst the antipodes, for they sometimes fled in troops, from the desire of marriage and a life of less hardship.

During the voyage, Zevallos was anxiously devising methods to tranquillize Paraguay, which he imagined to be embroiled with intestine war, and devoted to King Nicholas. On coming in sight of the shores of Buenos-Ayres, lest by a sudden landing he should endanger his men, he despatched some soldiers in a boat to feel the way before them. Perceiving a multitude assembled on the bank of the river Plata, they hailed them from afar with the usual interrogation of the Spanish guards, *Quien vive?*— Who reigns here? With one voice they exclaimed, that Ferdinand the Sixth was their king, and should remain so as long as they lived. This was more than enough to quiet the fears of the soldiers, who, deceived by European reports, imagined that King Nicholas would be dethroned with the utmost difficulty, and at the expense of their own and much foreign blood. Zevallos himself was astonished when he learnt that the Guaranies had long since been brought to submission. He had therefore no fighting with the Indians, but many contentions with the officers of the Portugueze faction, among whom the Marquis Val-de-Lirios held a distin-

guished place, as possessing, from royal investment, full power of determining every thing connected with the stipulated exchange of territory with the Portugueze. Equitable in other respects, but too studious of Queen Barbara's favour, he consulted principally the advantage of the Portugueze; while Pedro Zevallos, who laboured for the safety of his country, rather than the favour of his queen, endeavoured to oppose him. Having impartially investigated all the occurrences of the revolt previous to his coming, and discovered that many things had been written against the Guaranies and their missionaries, without foundation, and that others were basely exaggerated, he transmitted the court a correct statement of the matter, standing forth, on a sudden, the vindicator and eulogist of those very Guaranies he had come to put down and punish.

Tucuman, another division of Paraguay, extends very widely in every direction: on the East it reaches the territory of Buenos-Ayres; on the West, the mountains of Chili; on the South, it is bounded by immense plains, running out as far as the Magellanic region; and on the North, by the district of Tariji. It has a governour and bishop of its own, the one of whom resides at Cordoba, the other at Salta, the capital cities. Cordoba is famous for the beauty of its

houses, the number and opulence of its inhabitants, and a celebrated academy. In the richness of its pastures and the multitude of its cattle, it has no superior. Many thousand mules are annually exported from its estates to the Peruvian market. Lofty rocks rise in every part of the Cordoban district. A few leagues distant, on the banks of the river Pucara, which washes the city, is a place where lime is made. Coming to the place one night, when the sky was calm and the air tranquil, I heard terrible noises like the explosion of cannon. But the natives assured me, that these sounds were common to the neighbouring rocks and happened perpetually. The air, confined in the cavities of the mountain, and attempting a forcible passage through the chinks, when stopped by opposing rocks, and reverberated by their windings, bellows after this fearful manner. In the city of Cordoba itself, a hollow murmur, resembling the knocks of a pestle in a wooden mortar, is frequently heard by night. This low mournful sound runs from one street to another, and is called by the Spaniards *el pison*, or the paving-hammer. The ignorant vulgar believe that some spectre or goblin haunts the streets; as for me, I am convinced that it originates in subterraneous wind, which, forcing its way through the interstices of the earth, makes

violent endeavours to find a vent; for I observed the lands near the city excavated and fissured in many places by earthquakes. The city of Salta derives its principal profits from the passage of mules. St. Iago del Estero, a very ancient city of Tucuman, was long the seat of a bishop, and afterwards of a governour. The houses are, however, neither large nor elegant. Pope Innocent the Twelfth transferred the episcopal see from hence to Cordoba. The city of St. Iago boasts some tolerably handsome churches. It is washed by the Rio Dulce, which, during its annual flood, rolls down mountains of sands; excellent bulwarks against the cannon of assailants, if the city were ever besieged. The inhabitants of the district of St. Iago are distinguished alike for the greatness of their valour and the scantiness of their means in the wars against the savages. From the trade in wax, which they collect in their distant woods, and from that in corn, they derive some profits, inadequate, however, to recompense them for the hardships they undergo. Their herds are few, from the scantiness of the pastures: for the plains, which are bounded on every side with sand, supply a slender provision of grass, by reason of the frosts in winter and the drought in summer. In winter, when the fields are bare, I have observed the horses

cropping the branches of trees, nay, sometimes gnawing their trunks. Did not the Rio Dulce yearly overflow its banks, the soil would produce nothing esculent. This flood generally takes place about January, from the melting of the snows on the Chili and Peruvian mountains. The fertility of the soil is at that time incredible, producing abundant crops of corn, and water-pumpkins of great size and sweetness. Clouds of a remarkable hue announce the event to the natives. The woods around St. Iago abound in the *alfaroba*, which is converted into a drink, or a sweet-flavoured bread, and taken in either form is possessed of medicinal virtues. The Rio Dulce too supplies the inhabitants of its shores with food. Annually, but at no certain time, shoals of a fish called *zabalo* hurry down the river, and are taken by the hand, in such numbers that, during the period of their arrival, the lower orders need no other provision.

The city of St. Iago formerly numbered many Indian colonies within its jurisdiction, the ruins of which are now alone visible, the inhabitants having perished of want or the small-pox. Some little villages yet remain: Matarà, Salabina, Moppa, Lasco, Silipica, Lindongasta, Mañogasta, and Socconcho; they are governed by secular priests, and inhabited by a very few In-

dians, employed in the service of the Spaniards who live amongst them. Their condition is miserable, their barbarity beyond conception, their houses mere hovels, and their churches little better. The same may be said of all the villages remaining in the other districts of Paraguay.

The little town of St. Miguel, situated near the Chili mountains, is surrounded with hills, plains, large streams, and pleasant woods adorned with lofty forest trees, which supply the whole province with cedar planks, and timber fit for the largest houses. Rioja and St. Ferdinand, or Catamarca, little towns, buried amongst mountains, gain their principal returns from the culture of vines and red pepper, which is in daily use amongst the Spaniards. Not only meal, but even cheese, which, considering the multitude of cattle in the estates of Buenos-Ayres and Cordoba, is but seldom made, is seasoned so high with this powerful spice, that it acquires a deep red colour, and a pungency intolerable to an European palate. All the vineyards in Paraguay scarce equal the number of fingers on both your hands; for although the climate and soil are extremely suitable to vines, they are uniformly destroyed by an army of ants, wasps, and wood-pigeons. The little wine that is made is deep-coloured, thick, and gene-

rous, though to Europeans newly arrived it smells somewhat like a drug. The new must squeezed from the grape is simmered on the fire till it obtains a consistence. Such is the scarcity of wine in the remote colonies, that we were sometimes unable to celebrate the Eucharist. For whatever is used at the table or the altar, is principally brought from Chili, by a long journey, and at great expense, and often is not to be had for love or money.

In the districts of Rioja and Catamarca there is very scanty pasturage, and consequently few cattle; a want compensated by the fertility of the soil, the productiveness of the trees, and the industry of the inhabitants, who dry figs, weave a kind of woollen garment in common use, dress ox and sheep hides to great perfection, and apply the leather to various purposes, as saddles, trunks, and similar articles, to be commuted for other goods. Xuxuy, a district of St. Salvador, situate on the Peruvian side of Tucuman, though far from populous, is the seat of the royal treasurers for the last mentioned country. In this place, the tertian ague and wens are common; a circumstance arising from the rivulets flowing from the neighbouring mountains. Talavera de Madrid, also called Esteco, a state formerly flourishing in vices as in wealth, situate on the bank of the river Salado, is said to

have been swallowed up in the last century, with all its houses and inhabitants, by a violent earthquake; the ill-fated pillar applied to the punishment of delinquents alone remaining in the market-place.

Fareja, a city of some note, though within the jurisdiction of Chichas in Peru, contains Jesuits from Paraguay, who, in the hopes of civilizing the Chiriguanàs, a barbarous race, always hostile to the Spaniards, have neither spared their labour nor their lives; five of them were butchered by these savages.

Santa Cruz de la Sierra, with its territory, though bordering on the eastern confines of Peru, is within the dominions of Paraguay. Its longitude is 314°, its latitude 21°. It has its own governour and bishop, to whom are subject the towns of the Chiquitos, savages for many years instructed by the Jesuits in religion, humanity, and the useful arts, amid their distant woods. In 1766, the ten towns of the Chiquitos, founded by men of our order, contained 5173 families, and 23,788 souls; but the number of deaths far exceeds that of births. Whether this paucity of issue is to be attributed to the climate, the water, their food—especially the land-tortoises they use so much—or to a natural sterility in the parents, let the learned judge. I have frequently heard, that had not the Jesuits yearly

brought a multitude of savages from the woods; the towns must long since have been depopulated.

In each of the cities of Tucuman and Paraguay, the followers of St. Dominic, St. Francis, and St. Pedro de Nolasco, as well as the Jesuits, have their own establishment. Nuns of various orders dwell in Cordoba and Buenos-Ayres, but no where else. The Spaniards account Tucuman the poorest country in America, because it is destitute of gold, notwithstanding its numerous herds of cattle of every description. This province has been honoured with the presence of St. Francis Solano. When he was called away to Paraguay, many whole states were left without a single priest. Francis Victoria, of the order of St. Dominic, first bishop of Tucuman, in 1581 found only five secular priests and a few religious, with not one presbyter who understood the language of the natives, though the province abounded in Indian colonies. Solicitous for the glory of God, this bishop wrote to request Father Juan Atienza in Peru, and Joseph Anchuela in Brazil, to send him a few Jesuits already tried by previous exertions in the Christian cause. Fathers Leonardo Arminio, an Italian; Juan Saloni, a Spaniard; Thomas Fields, an Irishman; Manuel Ortega, and Estevam de Grao, Portugueze, were sent

by sea from Brazil, and being taken by the English, were for some time infamously treated, and at last exposed to the winds and waves in an open boat; but Providence happily guiding them, reached the port of Buenos-Ayres. From Peru, Fathers Francis Angulo and Alphonso Barzena had been already despatched into Tucuman. The last of these was created vicar-general by Victoria, who esteemed him so highly as openly to declare that he would himself vacate the bishopric could Barzena benefit by his abdication. To these have succeeded men of our order, one after another, for nearly two centuries. Summoned by the bishop and royal governour, sent from Europe by their Catholic sovereigns, and dispersed in every corner of Paraguay's immense extent, how strenuously they have toiled for God and their King, it is not my business to relate. Thousands of savages won over to God and the King, colonies founded on every side, churches built to the Lord, and numbers of Spanish cities imbued with learning and piety—these will testify that we have at least done something for the Antipodes, though many have left no stone unturned to blot out our very name. This is, however, beyond dispute;—that a far more abundant harvest might have been reaped from our apostolic labours, if the Europeans had not uniformly op-

posed, every measure conducive to the advantage of the Indians. Not a savage would now have been left in America, had every professor of Christianity conformed his life to its dictates, and joined his endeavours vigorously to ours.

The third division, from which the whole province takes its name, is that of Paraguay, so called from the river on which it borders. In regard to the laws of dominion its extent is immense; but from the dangerous vicinity of the savages on one hand, and the Portugueze on the other, the inhabitants, considering their number, are contracted into somewhat narrow limits. Extensive and fertile plains, both to the west on the opposite side of the river, and towards the north, are totally neglected, on two accounts—their distance from the metropolis, and the above-mentioned neighbours. The Corrientine country is accounted the southern boundary. The inhabitants are almost incalculably numerous. There are who assert their capability of bringing ten thousand soldiers into the field, Spaniards only: for if you count Indian natives, and all the herd of negroes, and other slaves, you might reckon up three times that number. But the majority of these deserve the motto—"*Nos numerus sumus, et fruges consumere nati.*" Some one was heard to complain of the governours of Paraguay—that many sol-

diers were ranged under the banners, but few who were furnished with a musket, and still fewer who could manage one if they had it. The metropolis, Assumpçion, takes its name from the assumption of the Virgin Mary. It is situated in latitude 25° 8′ and longitude 319° 41′, on the banks of the Paraguay, which affords a convenient station for ships and an opportunity of commerce, but menaces destruction to the city; for the channel constantly nearing and nearing, undermines the bank and the houses situate thereupon. Neither splendid edifices nor city fortifications are here to be found. Many of the houses are of stone or brick, and roofed with tiles, but none of them are above one story high. The monasteries are nearly of the same description, possessing nothing by which you could recognise the church. The streets are crooked, and impeded with ditches and stones thrown out of their places, to the imminent peril both of men and horses. It has but one market-place, and that covered with grass. The governor and bishop have resided here since the time of Charles V. though neither has any proper seat. Besides grammar, the scholars in our college pay much attention to philosophy and theology. For the negroes, Indians, and mulattos, there is a separate priest and parish church. Even matrons of the higher rank, boys, girls, and all the lower

orders speak Guarany, though the generality have some acquaintance with Spanish. To say the truth, they mingle both, and speak neither correctly. When the Spaniards first occupied this province, in which the Guaranies had previously settled, for want of Spanish women, they took the daughters of the natives in marriage. The couples presently caught each other's dialect; but as is usual with adults, who learn foreign tongues, the Spaniards miserably corrupted the Indian, and the Indian the Spanish language. Whence from the original two, a third dialect arose, in use at present.

The major part of the Spaniards live in hamlets, farms, and little villages, where the convenience of land and pasturage is greatest: cities, except the metropolis, they have none. Villa rica and Curuquati are meagre places, mere shades of towns, the inhabitants being almost obliterated, by frequent migrations, from fear of the Portugueze. Xerez and Ciudad Real del Guayra, which once boasted the name of cities, have long since been destroyed by the incursions of the Portugueze who, assembled in the city of St. Paulo, enjoy, to this day, the finest parts of Guayra, the Spaniards vainly lamenting the seizure of the noblest part of their territory.

Of the ancient towns, where the Spaniards

settled the Indians they had subdued with arms, or won by religion, there remain Caazapà, Yuti, Ytape, and Yta, which are governed by Franciscans. Caazapà contains about two hundred families, and exceeds the rest in the number of its herds. Ytape contains about twenty families; Yuti and Yta, somewhat more. They are all governed by parish priests. Atira and Altos together form one little town. Quarambare and Jobati are both inconsiderable. Yaguaron consists of two hundred families. The Indian inhabitants are mostly employed in the service of the Spaniards, and consequently in populousness, morality, and the appearance of their churches, vastly inferior to our Guaranies, who, exempted from private servitude, are accountable solely to the Catholic King.

In the dominions of Paraguay are three other towns, founded and preserved by men of our order. St. Joachim, situate in latitude 24° 49′, and longitude 321°, on the banks of the Yù, which, in 1767, numbered 2017 Christian inhabitants, named Ytatines or Ytatinguays. As early as 1697 about four hundred persons were discovered in the neighbouring woods of Taruma, by Father Bartholomew Ximenez and Francisco Robles, and assembled in the town of Nuestra Senhora de Sta. Fè, 150 leagues distant from Sta Fè, where they held the Christian

religion many years. But love of freedom at length bore them back to their original forests, whence they were in vain recovered, by fathers of our order, in the year 1721. In the place called Taruma, a little town was built for them, which, in 1723, contained three hundred souls. But partly from the poorness of the pastures, partly from the disturbances raised by the Spaniards, on occasion of Joseph Antequera's obtruding himself upon them as governour, the Ytatines were again removed to Nuestra Senhora de Sta. Fè, where they remained ten years, and bore a good report. But the bloody insurrection of the neighbouring Spaniards, famine, and the wasting pestilence of the small-pox, compelled them, in 1734, to take refuge in the forests they had formerly occupied. On the instant, Fathers Sebastiano de Yegros, Juan Escandon, Felix Villagarzia, and Luke Rodriguez, were sent to explore the lurking-places of the fugitives, and, after a laborious journey of eighteen months, returned unsuccessful. At length, in 1745 accident effected what labour could not. By the command of the superiors, Father Sebastiano de Yegros began the search, and after a forty-nine days journey of matchless difficulty, found the Ytatines in the woods of Tapebo. No opposition being made on their parts, a town was built for them in their native

soil. Cattle of all kinds, clothes, axes, household furniture, and a few masters of music, and other arts, being sent from the old town, every thing went on favourably.

But a sudden terror interrupted the prosperous course of the new colony. The Guaycurus or Mbayas began to devastate the neighbouring estates of the Paraguayrians with slaughter and depredation. The Ytatines, thinking the marauders already upon them, lost all sense of safety. Alarmed by perpetual rumours of the enemy's approach, they spent their nights without sleep, and in open daylight still dreamt of peril. To this another distress was added: the want of water. The Fathers therefore judged it expedient to remove twenty-five leagues southwards, where the intermediate forests could protect them against the Guaycurus, and afford them a constant supply of water. In 1753, having left their church, and the residence of the Fathers, they built a town on the spur of the moment, which was regulated after the model of the Guarany colonies, increased by the accession of new families, and settled on a good foundation. To this city I devoted eight years of unregretted labour. When D. Manuel de la Torre, Bishop of Assumpcion, payed us his accustomed visit, he beheld with admiration the rigid Christian discipline,

the accuracy of divine worship, and universal good order established among men so lately inhabitants of the woods. D. Carlos Murphy, an Irishman, and governor of Paraguay, was delighted during his five days' visit at my house with the dexterous management displayed by the Indians as well of their musical instruments, as of their weapons.

Another colony in the jurisdiction of Paraguay, that of St. Stanislaus, is the offshoot of St. Joachim. For the Ytatines, discovered by the joint efforts of the Indians and the Fathers of St. Joachim in woods situate between the rivers Caapivarÿ, Yeyuÿ, and Tapiraguaÿ, were prevailed upon to assemble in one place and embrace the Christian religion. Arduous, indeed, was the task of persuading them to leave their native woods; for, accustomed to the shade of towering trees, they shun the exposed and sunny plain, where they think their lives and liberties daily endangered. Father Sebastiano de Yegros lived a year in the woods with the savages; at the end of which time, he persuaded them to relinquish their woods, and occupy the plains bordering on the river Tapiraguay, whither Fathers Manuel Guttierrez and Joseph Martin Mattilla bought cattle and the necessaries of subsistence, and in 1751 erected a chapel and dwellings. Softened by the kind-

ness and liberality of the Fathers, they became docile and conformable to Christian discipline. In my visits to this town, I could not but admire the gentle disposition and compliance with divine regulations, displayed in a people bred in woods and thickets. In a few years the town was increased by the accession of Indians, won over by Fathers Antonio Planes, Thaddeus Emis, a Bohemian, and Antonino Cortada, after arduous journeys amid pathless wilds. This colony lies in latitude 24° 20′, and in longitude 321° 35′. In 1767 it contained upwards of two thousand three hundred inhabitants, who had formerly wandered over those woods, where the Spaniards gather the herb of Paraguay. So that from the towns of St. Joachim and St. Stanislaus, a lucrative trade is opened to the whole province by the removal of the savages; since which the Spaniards can fearlessly traverse the woods that produce the herb in question.

In confirmation of this, I will cite a remarkable instance. The remote forest of Mbaeverà abounds in the trees of the leaves of which the herb of Paraguay is made. To prepare this, a multitude of Spaniards, with the necessary oxen, horses, and mules, are sent from the city of Asumpcion. The forest through which their journey lay, a tract blocked up with

mingled trees and reeds, and impeded with twenty-six rivers, and as many long marshes, is full eighty leagues in extent, in which space you will rarely find ten paces of plain land. To render this passable, it was requisite to fell trees, to throw bridges over the rivers, to give the marshes consistence with bundles of boughs, and to level the declivities. When these things had been effected with equal labour and expense, huts were required to receive the Spaniards, hedges to inclose the beasts, and a frame work formed of stakes partly driven into the ground, partly laid cross-wise, to roast the leaves on. The necessary preparations made, the Spaniards were sent to the woods where the leaves were gathered. But their superintendant Vilalba lit upon a hovel, which, though empty, evidently belonged to the savages. Struck with the unexpected occurrence, he hastened to his companions with the news, which instigated them to immediate flight, and to think of saving their lives instead of gathering the herb of Paraguay. Nor do I, on this account, think them to be accused of cowardice or sloth. For in seeking the trees from which they lopped the branches, they did not traverse the woods in one body, but separately, and when they returned home, they were loaded with burthens. Moreover from carrying no

weapon but the knife they used, they were always undefended from the assault of the savages. Abandoning therefore the business on which they had come, they returned to the city on their mules and horses. Vilalba, quitting his associates, turned aside to the city of St. Joachim, and related to the Fathers what he had seen and done, conjuring them to endeavour by every possible means to bring the savages to their town. The Fathers readily began the attempt. But, perceiving themselves unequal to such a journey, dispatched a chosen band of Indians, under the conduct of Vilalba, to search out the savages, and sound their inclinations. After some days, having imprudently consumed their provisions, they turned back before they had even approached the station, which the Indians were supposed to hold. So that the glory of finding these savages was reserved to the author of this work.

Some years after, I was sent by the superior to the city of St. Joachim. The rumour concerning the Indians of Mbaeverà continued to spread, and with it the fear of the Spaniards, who durst not even approach the woods, which promised so abundant an harvest of the herb of Paraguay. Under the conduct of Vilalba, I set out with five and twenty Indians, through marshes and rivers. The bridges and

other aids, prepared to secure the passage of the Spaniards, had long perished. Every obstacle however being overcome, we arrived at the place in question, and discovered the remains of the savage hut. The bones of apes, boars, and antas, a wooden mortar, a few grains of maize, and other things of this kind, were discovered there; a path leading to the river side, well trod with the naked feet of the Indians, was also visible; but not a single recent vestige could we any where detect, though for many days we attentively searched both the neighbouring woods, and the banks of the river Acaray. After having traversed the mournful solitude eighteen days, and suffered what neither I can describe nor my reader credit, as no hope remained of finding the Indians, we returned to the town, the improvement of our patience being our only recompense. I walked the whole way, and often barefoot. Had I turned ever so little from the east to the south, we should have found the habitations of the savages, as was proved to me the following year. The Spaniards, being made acquainted with my diligent search of the forest of Mbaeverà, persuaded themselves that the savages had migrated elsewhere, and accordingly set out thither in great numbers. But, lo! in the course of their business, they perceived the

savages dropping in upon them one after another. Conciliated by familiar discourse, and presents of beef and other trifles, they seemed to entertain no hostile sentiments, but visited the dwellings of the Spaniards in friendly guise. To enquiries concerning their place of abode, they replied that it was at a great distance; and could only be approached by crossing many marshes; a cunning answer, dictated by their fears for themselves and their wives, if visited by the Spaniards. Lest their footsteps should betray their resorts, in returning home they practised the following artifice: if they went by a southern, they returned by a northern road, and contrariwise, so that the Spaniards could not form an idea of the place where they lurked. And thus the savages and Spaniards suspected one other, and their mutual distrust increased every day.

Vilalba, alarmed for his own safety, informed me how matters stood, and assured me of success in discovering the savages if I would only renew the attempt. I undertook the journey without delay. But scarcely had two days elapsed, when all the rain in heaven seemed combined to overwhelm us, and after eight days of misery, compelled us to return, from the certainty of still greater wretchedness, if we proceeded. Twenty days the obstinate rain

continued, yet we did not think our business desperate, and on returning to the town, I impatiently awaited an opportunity of renewing it. Not long after, I undertook a third expedition, which proved successful. At length I reached my post, discovering three tolerably populous hordes, over whom presided as many caciques; Roy, Tupanchichù, and Veraripochirìtù. The first hut we met with was built of palms, interwoven with dry grass, opening by eight doors and containing sixty inhabitants. Here and there hung nets which are used both to sleep and sit in. Each family has its own fire, on the hearth around which stand a multitude of pots, gourds, and mugs. They are generally handsome, particularly the youths; from never being exposed to the sun their faces are fair. The males of every age shave their heads, a circle of hair being left on the crown. At seven years old they have their under lip pierced, and insert a reed of the thickness of a quill into the hole. All of whatever sex or age hang a common triangular shell in their ears. The men go almost naked, wearing nothing but a narrow girdle round their loins, but the women are covered from head to foot, with a white garment manufactured from the bark of the Pinò. These savages ornament their heads with crowns of long parrot feathers,

disposed with considerable elegance. Their arms consist of barbed arrows, with which they shoot even little birds on the wing with great dexterity. They maintain themselves and their families by the chase. They often lurk in thickets, for the purpose of shooting or ensnaring antas, which they inveigle by a skilful imitation of their bray; nor are they wholly averse from agriculture. In these woods there is an amazing produce of maize, and other fruits, as also of tobacco. On going to bed they put their pots full of flesh or vegetables on the fire, that their breakfasts may be ready when they awake: for at earliest dawn, the males, from seven years old and upwards, traverse the woods with a bundle of darts, in search of that game, on which they must subsist for the day. The mothers put their babies in wicker baskets, and carry them on their shoulders, when they travel in the woods. From the hives with which the trees abound, they collect quantities of most excellent honey, serving both for meat and drink. Their name for God, in the Guarany tongue, is *Tupà*, but of that God and his commandments, they care little to know. They are as ignorant of the worship of idols, as they are of the Supreme being. The spirit of evil they call Aña or Añanga, but they pay him no adoration. The magicians, or more properly

imposters, who arrogate to themselves full power of warding and inflicting disease and death, of predicting future events, of raising floods and tempests, of transforming themselves into tigers, and performing I know not what other preternatural feats, they religiously venerate. Like other Americans, they think polygamy allowable, but rarely avail themselves of the license: from which circumstance, repudiation is frequent among them. Marriage with the most distant relations they shun as highly criminal. They inclose their dead in large vessels of clay, according to an old Guarany rite. What their fate after this life may be, they never trouble themselves to enquire. They do not feed on human flesh to my knowledge, though the neighbouring Indians reckon it a delicacy. Every stranger whatsoever, Indian, Spaniard, or Portugueze, they suspect of hostile intentions, and receive in arms, believing every other race their enemies and designers on their freedom. They harboured the same suspicion with regard to me and my Indian comrades, when they saw us coming.

The first whom we discovered in the woods was a fine young man holding a bird like our pheasants, expiring in his hand. I approached the astonished youth, complimented him upon his singular skill in archery, and, as gifts prevail

more with the Indians than fine words, presented him with a piece of roast meat, which he devoured with all the avidity of hunger. This unexpected breakfast dissipated the alarm which the sudden appearance of strangers had excited. His name was *Arapotiyu*, or the morning: for in the Guarany tongue *ara* signifies *day*, *poti* the *flower*, and *yu* whatever is *yellow* or *golden;* so that by the golden flower of day they express the morning. And from this *morning*, we discovered that the *sun*, Captain Roy, the principal cacique of the vicinity, was the youth's father. For whatever questions I put to him, he quietly answered, and said, that his father was occupied in hunting, not far distant. "Come then," said I, joyfully, "conduct us to him as quickly as possible." To this the youth willingly assented, keeping close to my side the whole way. Having proceeded through the woods for the space of an hour, we beheld an emaciated old man, armed with an immense knife, and creeping at a snail's pace, accompanied by two youths (his son and a captive) furnished with a bundle of arrows. The Indian Christians who were with us bent their bows and the points of their arrows to the ground, to testify friendship, on approaching him; one of the more aged of my companions kissed the left cheek of the cacique, as a sign

of peace, and explaining the reason of our coming, said, "'God save thee, brother! See, we are come to visit you as friends, for we think you akin to us. And this father-priest, whom we attend, is the minister of God himself. He teaches us, feeds us, clothes and tenderly loves us; for when he buries our dead, wrapped in a white cloth, he chaunts over us." My Indian would have spoken more, but the old man interrupted him with an ironical and angry exclamation of *Hindo!* repeated several times. He vehemently denied that any relationship existed between them, and regarded us with the most wrathful aspect, supposing us to be Spanish or Brazilian Portugueze Indian-hunters. Then addressing himself to me, he angrily said, "You are come in vain, father-priest: we don't want a father-priest. St. Thomas long ago prayed enough for our land. All kind of fruits grow in plenty here." For the rude savage thought the presence of a priest useful only in procuring fertility to the soil. "Granting," I replied, "that St. Thomas was formerly in your territories, yet whatever he taught your ancestors of the Supreme Deity and his laws has long since escaped your memories. I am ready to repeat his instructions. But, bless me, good old man, why do we stand talking in the mud? why don't we sit down on the trunk of the tree,

which is out of the swamp?" Accordingly we sat down, and I detailed to him the occasion and the hardships of my long journey. To win the good-will of the surly old man, I ordered a choice piece of roast meat to be brought him; which he greedily seized and devoured. His hunger appeased, his jealous mind began to soften, and I tried all ways to find an entrance to his heart. To this end, I offered him some snuff, but pushing it from him with both hands, he answered, "*Aquihiye*," I fear it, supposing it magical powder, possessed of the power of charming. I then opened to him my design of visiting his horde, but he argued it to be impossible. "My residence," says he, "is very far distant from hence. Three rivers, as many marshes, and the worst possible roads intervene." "By this argument," answered I, "you can never divert me from my purpose, who, after a journey of so many days, have succeeded in overcoming so many rivers and marshes, and such woods." "But you must know," opposed the old man, "that my health is not very good, and that I feel myself unequal to the journey." "I can easily believe that," was my answer, "when I am daily made sensible of my own ailments. And no wonder: the badness of the weather, the copious rains, the wet forest, the muddy roads, the long

marsh, which I crossed up to the knees in water, the steep mountains which I ascended, the want of food, and the continued walking from day-break till past mid-day, how could they fail to produce ill health? But though we are thus debilitated, yet I think we have strength enough left to carry us to your home, where we can rest ourselves. We will take it easily: let those who are stouter go before; we that are infirm will follow slowly after." "You would keep away from my dwelling," answered the old man, "if you knew the peril that awaits you there. My countrymen are of an evil disposition; they want to slay, slay, slay all strangers." "Though your countrymen," answered I, laughing, "resemble your portrait ever so accurately, I need feel no apprehension on that account. With you, the terror of the vicinity far and near, with one so illustrious for valour and great deeds as you, for our friend and protector, what mortal durst attempt to injure us? With you at our side we will fear nothing." By this apparent confidence, by these praises, I won the old man's heart, and found him my friend. In a cheerful tone, he exclaims "It is well!" and orders the two youths to hasten home forthwith. "Tell our countrymen," says he, "that a father-priest is here, who makes much of me, and a company of Indians who

affirm that they are of our blood. Charge the women not to be frightened at the stranger's approach, but to sweep the house diligently, according to my particular desire." About sweeping the house, thought I to myself, I care little; but that the savages might possibly take it into their heads to discharge all their quivers of arrows upon us, that was indeed a reflexion that disturbed me not a little.

Away went the messengers like the wind. The old cacique and I pursued their footsteps at a slower pace, beguiling the inclemency of the weather and the asperities of the journey by familiar conversation; and whilst the majority of Europeans were feasting luxuriously, (for it was the third day of the carnival,) *we*, sitting on the margin of a river, restored our exhausted strength by a draught of cold water. About sun-set, the vast hut I described appeared in view. A crowd of the natives, fitted out with bows and arrows, and crowned with parrots' feathers, attended our arrival and addressed us with the usual salutation *Ereyupa*, Now thou art come: to which I returned the accustomed *Ayù anga*, Now I am come. One of them approached me, and, as if angry with himself for having forgotten his crown, ran back for it, and returned with it on to greet me. As I was standing with some of my companions

at the door of the house, there arose a mighty trepidation amongst the women and children. "There is nothing at all to be afraid of, dear sisters," said the eldest of my Indians. "You see before you your relations, the descendants of your ancestors. Not one of us harbours an evil thought towards you. I am the chief and director of them all." "What the old man has told you," said I, "is perfectly true. No one present is evilly disposed towards you but myself. I am a terrible fellow; for" (putting on a fierce countenance and uttering a hiss) "at one mouthful I intend to devour two or three children." This pleasantry changed all their terror into laughter. The women returned to their stations, and with one accord entreated me to enter the house. "You will never persuade me to that," replied I. "I see you have dogs and whelps amongst you, and where dogs are there must fleas be also: now there is nothing I dread so much as fleas, because they are disturbers of sleep, which, after the fatigues of a long journey, I feel myself sorely in want of. But I will not go far from your residence. In this open spot, where I may see and be seen by all, I am resolved to station myself." And truly, for the sake both of decorum and security, I spent three days and nights in the open air, though the weather was occasionally rainy.

The same evening I hinted to the Cacique Roy, that I wished to see all the inhabitants of the place assembled in one spot, that I might address them, and present them with suitable gifts. My wishes were immediately gratified. They sat around me in such modesty and silence that I seemed to behold statues instead of men. To awaken their attention I played for some time on the viol d'amour. Now, though I think myself the very worst of musicians, yet in these woods I was pronounced an Orpheus by my auditors, who had never heard a better or a worse performer than myself, or indeed any other music whatever, except that which they produce with rattling gourds together. I then addressed the assembly to the following effect: "I do not repent the long journey I have taken, the rivers and marshes I have crossed, the troubles which I have undergone, now that I see you well and kindly disposed towards me. My errand is to render you happy; your friend I am in all sincerity. Suffer me then to declare candidly what I feel with respect to you. I lament and pity your lot, which has buried you amid the shades of woods, ignorant alike of the beauties of the world and of God their creator. I know you pronounce the name of God; but how he must be worshipped, what he forbids, what he or-

dains, what he promises to the good, and what threatens to the evil, that ye know not: nor, unless taught by a priest, can ye ever learn it, miserable while ye live, and most miserable hereafter when ye die." Here I briefly explained the principal heads of religion with what plainness I could. As I discussed these things, they all listened very attentively; except that the boys laughed a little when I made mention of hell fire. The old man also, when he heard from me that marriage with relations was forbidden, exclaimed, "Thou sayest well, father; such marriages are abominable, but this we know already." From which I discovered that incestuous connexions seemed more execrable to these savages than murder or robbery. Just as I was about to finish my speech, I eyed the congregation more attentively, and cried out, like one astounded, "Alas! in all this numerous assembly I see very, very few of an advanced age; but the reason is manifest. The daily miseries which surround you ruin your constitutions, and bring on a premature death. With naked limbs you daily suffer the injuries of the weather. Your roofs, pervious to every wind, how little do they defend you! Whole days you traverse the woods like famished wild beasts, the chase at last often fruitless, your subsistence fortuitous, what wonder then if

continual solicitude about your maintenance harasses your minds? Not to mention the constant risk to which your lives are exposed from the claws of tigers, the bites of serpents, and the weapons and teeth of enemies. Nay, setting aside these things, a soil always damp, as I find yours to be, swarming with gnats and other insects, must unquestionably prove the nursery of diseases. And what hope can the invalid entertain of recovering his health in this your solitude, far from medicine or medical advice? For those whom you call physicians are impostors, fitter for cheating than curing you. From such inconveniences and perils, the Indians your brothers are almost free, who, assembled in one town, conform their lives to the commandments of God and the regulations of the priests. How many old men might you meet with there! Nor need you wonder that the majority extend their lives to the extremity of age, when such and so many assistances are supplied them in the city, of the highest efficacy in prolonging life. In the town separate dwellings are marked out for each, not indeed always the most splendid, but fortified against the vicissitudes of the weather. A suitable portion of beef is every day awarded gratuitously to each. With corn, fruit and vegetables they are commonly well

enough supplied from their own land. Every year new clothes are distributed to each. Knives, axes, glass-beads, and similar ornaments, are given as presents. Skilful physicians are night and day in attendance on the sick, who carefully provide them with food prepared in the father's dwelling, and with fit medicine, as occasion requires. If any of you think I have made a greater boast of these things than truth warrants, see before you stand Indian Christians, your brothers, and my companions and clients, of whom the greater part were born and brought up in woods like yourselves, and now, for many years back, have lived under my authority in St. Joachim. Cast your eyes on their garments. Enquire from them the mode of life which exists amongst us. You will quickly learn that they are contented with their lot, and think themselves most happy in every point of view. They have been what you are now; and you have it in your power to be what they now are. Do not deny yourselves this felicity. Consider whether it be expedient to immure yourselves in dusky woods, the prey of successive calamities, and final death. It rests with you to act conformably to my good instructions. With open arms we will receive you as friends receive friends, and without delay make you our fellow townsmen.

To propose this to you, and persuade you to accept it, I have taken a long and, as you know yourselves, a most difficult journey, urged by my love and yearning towards you;—but no more need be said on this subject."

To add weight to my oration, I presented each of my auditors with trifling gifts,—little knives, scissors, hooks, axes, mirrors, rings, ear-rings, and necklaces of glass-beads. I seemed to have borne down all before me, because I had mingled my oration with a copious largess. For it passes belief with what significations of joy and good-will towards me, on the breaking up of the assembly, each retired to his quarters. In a little while, Cacique Roy, to testify his gratitude, offered me some loaves, prepared, he said, on my account, by his old wife. These loaves were round, made of maize, thin, baked under the hot ashes, which they resembled in colour, and, in a word, so disagreeable that their very sight would disgust the most hungry European. Nevertheless, to temporize as much as might be, I praised the skill of the baker, and their great disposition to gratify me; and taking them in one hand, returned them pleasantly with the other, adding, that it would please me highly if his children would feast on these dainties to celebrate my arrival. The old man approved my counsel,

and took back the loaves with the same joy as he had brought them. Strangers must indeed be cautious how they receive food offered by savages, who are very skilful in mixing it with poison, and though officious, always to be feared, as regarding other tribes with an hostile eye. Cacique Roy had a little house for himself and family separate from the rest; yet during the three days we spent with them, he passed the night in that vast dwelling I have named, whether anxious for the safety of his own subjects or of us, I know not. We spent our nights in the open air in the middle of the dwellings of the savages. I cautioned my men to sleep and watch by turns, lest we should be surprised in our sleep by the designs of many. But there was not a symptom or occasion of fear on either side, though the suspicion of danger never left us. On the following day, I sent four chosen men of my associates, with Arapotiyù, to slaughter an ox, which I had left at a distance, and bring its flesh to make a feast for the savages. Nothing could have been devised better calculated to raise their spirits; for the Americans never rejoice with more heartfelt glee, nor pay a more prompt obedience, than when their stomachs are full of beef. The Cacique had a pleasure in spending many hours of the day in familiar conversation with me. He

told me ingenuously, that both he and his distrusted the Spaniards and Portugueze in every thing. To conciliate therefore his confidence and good-will towards me, I declared that I was neither a Spaniard nor a Portugueze. Which circumstance being strongly urged by me, the Cacique told all his hordesmen that I was neither of Spanish nor Portugueze extraction, which had the utmost effect in tightening the new chain of friendship and good-will towards me which bound their savage minds. I must here relate a circumstance which I cannot write without a blush, nor can it, I think, be read without a smile. As the Cacique was smoking tobacco through a reed, he opened at once his intentions and his ignorance to my Indians who were sitting with him. "I have conceived an affection," says he, "for our father, seeing for certain that he is not a Spaniard, and should like to enjoy his company as long as I live. Now I have a daughter, the prettiest girl in the world, and I am resolved to marry her to the father, that he may always stay in our family. This intention I have just broke to my wife, and she is of the same mind as myself." On hearing this foolish speech of the old man's, my Indians could not refrain from laughing; and being asked the cause, replied, "that the fathers always live celibate,

and are interdicted from marriage by the most sacred law." The old man was thunderstruck; "*An eyrae!*" he exclaimed, with his tobacco reed suspended in the air, "what strange thing is this you tell me?" His astonishment was mingled with sighs, for he grieved that he could not accomplish his wishes. This ridiculous conversation I overheard walking behind among the trees, but dissembling my knowledge, asked my Indians, what the sudden laugh meant; but they were ashamed to repeat to me the Cacique's absurd proposal, and blushing held their peace. It is observable amongst the Guarany Indians, that if many are asked at once, no one answers. I therefore asked one of them separately, who related to me the whole conversation. I thanked the Cacique for his kind intentions towards me, and told him that I and all priests professed that kind of life which excludes wedlock altogether; but that though I could not be his son-in-law, he should always find me his most sincere friend, and, if he wished it, his companion and instructor in Christianity. When he had heard this he redoubled his astonishment and his declarations of affection.

Immediately on my entering the savage horde the preceding day, I had asked them to despatch messengers to acquaint the neighbouring

Caciques of our arrival, and exhort them to visit us there. The next day about noon the armed savages arrived in great numbers with their families. Two Caciques led the troop. The first, who was called Veraripochirità, equalled in height and fullness of body the length of his name, a man remarkable for nothing but gentleness and docility. His son, a handsome boy of ten years old, had all his face painted with small black stars. "You think," said I, "to adorn your face with these stars, but you have disfigured it most wretchedly. Come, behold yourself in this mirror." Having looked at his face a little while, he hastened to some water to wash it, and he, who with his naked limbs, had just before come to me a perfect Pyracmon, when he had wiped off the soot, seemed transformed into a Daphnis. I presented them all with the accustomed trifles, conversed familiarly with each, and very frequently with their Cacique Veraripochirità, whom I found particularly disposed to our worship. The other Cacique, who appeared with his troop, was Tupanchichù, a man scarce forty years old, handsome and well made, but destitute of that fairness of face and candour of mind which the others boasted. Arrogant, crafty, and designing; under a placid countenance and a perilous suavity of speech, he con-

trived to cover his cherished purpose of slaying us, which was, however, discovered by others. On coming up he seated himself with me, and demanded, in an imperative tone, a portion of the herb of Paraguay. Some friendly interrogations having passed on both sides, I seized a favourable opportunity of discoursing on the Deity. "We already know," he observed, "that there is some one who dwells in heaven." To this I returned, "that God was the supreme creator and ruler; that he was a tender loving father, most worthy of our hearts and adorations; that it behoved them long ago to have known and understood what pleased and what displeased him." "Tell me, I pray you," said he, "what *does* displease God." "He abhors," I rejoined, "and terribly punishes adulteries, uncleannesses, lies, calumnies, thefts, homicides." "What," he enquired, interrupting me, with a haughty look, "does not God permit us to slay our enemies? Should we be such fools as not to defend ourselves against those that seek our lives? Such has been my custom if any one threatened mine." I endeavoured to convince the fanatical casuist of his error, and to instil into him a horror of human slaughter, with what success I know not. At that time I learnt from good authority, that this barbarous Cacique, who was feared by the

whole neighbourhood as a formidable juggler, displayed in his tent an heap of sculls, whose former possessors he had taken off, partly by poison partly by violence.

At last the Caciques made a final resolve, and entreated me to get a colony founded for them in their native land, like those which the other Indian Christians had obtained. I consented to their wishes with the more pleasure, from perceiving the opportunities of seeking out other savages in the remoter forests, which a settlement in the woods of Mbaeverà would afford. Tupanchichù, though averse to the worship of Christ, durst not oppose the other two Caciques, men of more weight than himself as well from their age, as from the number of their adherents. He cunningly therefore pretended to assent, that he might the more certainly overturn the design of founding a colony. After having spent three days with them, I told them all that I intended to depart the next day, but that when I had procured cattle, and other necessaries for building and preserving the town, I would immediately return. To testify their good-will the Caciques made their sons accompany me to my town. The hypocritical Tupanchichù having no son grown up, associated with me his wife's brother, a youth of surpassing comeliness. Four sons of Cacique Roy came

with me; Arapotiyu, the eldest, Avarendi, the second, and two who were yet boys; Gatò, a young captive of the Cacique's, also attended us. To these were added some married men, so that, altogether, eighteen savages accompanied us on our way. The Spaniards, whom we met advancing, when they saw me accompanied by so many naked savages, armed with bundles of arrows, and adorned with crowns of parrot feathers, after their first panic had subsided, paid me liberal applauses and congratulations. Finally we entered St. Joachim in triumph, and were hailed by the festive acclamations of the inhabitants. Our Indian guests were liberally treated, clothed, and largely gifted with knives, axes, glass-beads, and other trifles. After resting fourteen days they were sent back to their woods, attended by some of my Indians, Arapotiyu excepted. This youth, from the time when he first met me, would never suffer himself to be separated from my side. Having for some months tried his constancy and his acquaintance with every thing pertaining to Christian worship, I baptized, and, not long after, united him in marriage, according to the Christian rites. Though a new inhabitant of our city he surpassed in every kind of virtue, and he might have been taken for an old disciple of Christianity. His lamen-

tations knew no end, when by the royal summons we were recalled to Europe, amid the tears of all the Indian colonies. The captive Gatò also remained with us in the city fully contented with his situation, and behaving so well that his conduct obtained him baptism and Christian wedlock. But not many months after he died of a slow disease.

Our Indians, returning from the woods of Mbaevera, brought news that the quinsy was raging among the savages; that the jugglers, especially Tupanchichù, endeavoured to persuade the ignorant multitude that this pest was introduced by us, in order to inspire them with a hatred of the Christians. I immediately despatched letters to my provincial, in which I informed him of my journey, the savages I had discovered, and the intended foundation of a settlement. He approved my design, and when my return to the savages drew near, supplied my room in the town of St. Joachim with another father. The royal governour, also, D. Joseph Martinez Fontes, was made acquainted with what had been done and what was further intended, and requested to invest me with the power of founding the colony. But, alas! the devil interrupted this prosperous course of affairs, by means of two of his agents, the inhuman Tupanchichù and an opulent Spaniard.

Attend and shudder at the detail of their villainy. An unexpected messenger arrives from Mbaevera with the news that Cacique Roy had died of eating poisoned potatoes, administered by Tupanchichù, who, not content with the murder of the old Cacique, had attempted the life of his widow, that he might possess himself of the knives and other iron implements which her husband had left. This woman, despairing of safety in the forest, betook herself to the town with her family. The mother having been well instructed in the rudiments of the Christian doctrine, was baptized on the same day with her eight children and a single captive, to the great comfort of the by-standers;—as for *me*, my joy can scarcely be conceived. Though the iniquitous deed of Tupanchichù is worthy of universal execration, yet still more detestable appears the memory of that man who, actuated by the base desire of self-aggrandizement, dared to frustrate the colony we had in agitation.

This man, a Paraguayrian, but not of Spanish extraction, having amassed great riches, principally from trading in the herb of Paraguay, required a multitude of slaves to manage his concerns; and when he understood that numerous hordes of savages were discovered by me in the woods of Mbaeverà, and that a colony was to be built there, he conceived a design of

transferring these savages, by some means or other, to his estate that he might use them instead of negroes, who stood him at a great price. To this end, he selected men, versed in the Guarany tongue, to persuade the savages to that which he desired, directing them to gain over, with large presents, whomsoever words failed of affecting. These arts they put in practice, but without prevailing on a single man. And truly it was madness to expect it of the wood Indians, who, from the dread of slavery, shun the neighbourhood, yea the very shadow of the Spaniards; and who, now that their settlement had been thoroughly explored, began to despair of their safety—to fear lest that Spaniard, whose service they were unwilling to embrace, should sometime despatch an armed troop of soldiers to drive them into slavery and exile. This danger being daily and nightly before their eyes, they at length resolved to change their quarters and seek a retreat as distant as possible from their present abode, and accordingly, having burnt their hovels to ashes, they all migrated like runaways rather than travellers.

Being informed of this flight of the Indians, I set out thither with forty Christians, among whom was Arapotiyu, who was thoroughly acquainted with the circumjacent ways and woods.

But after doing much and suffering more, we effected nothing: and having traversed the banks of the rivers Mondaỹ and Acaraỹ and the interjacent country, without detecting a trace of man, we were forced to remeasure our sorrowful and weary steps: which circumstance filled every honest breast with unspeakable grief. The Spanish and Indian Christians burnt with indignation against that man who had dared to devastate an harvest ripe for the shearers, and ready for the granary of the church.

In endeavouring to make these savages slaves he hindered them from becoming worshippers of the Supreme Being and disciples of Jesus Christ. But divine providence took vengeance on his crimes.

He had a number of hired men employed in the woods of Mbaeverà, upon the preparation of the herb tea, a great quantity of which, already prepared, awaited the mules which were to convey it to the city. Meanwhile it was kept in the hut of the Spanish labourers, an edifice situated on the banks of the river Acaraỹ, which were covered with reeds and tall grass. These were suddenly seized with an immense conflagration, kindled by the savages. The superintendant, fearing for his magazine, in order to extinguish the approaching flame, despatched eighteen of his comrades —to perish in the same

conflagration; for a sudden blast of wind in flamed the whole surface so quickly that the Spaniards beheld themselves encircled with fire without an outlet left for their escape. Some leapt into the marshes, but they were almost dry;—some plunged into the mud, but all their endeavours were vain. They were not absolutely burnt, but suffocated, scorched and roasted, their garments, in general, remaining unhurt. The same evening thirteen miserably perished; the next day three more; the other two came to a still more wretched, because a more protracted end. The spies of the savages witnessed this destruction of the Spaniards, but afar off, lest themselves should be hurt; now more daring, from having perceived the fewness of the Spaniards, one, armed with arrows and a club, stole into the Spanish hut where only one man remained. "So," said the savage with a stern aspect, "you have dared to enter these woods, which were never yours! Know ye not that this is our hereditary soil? Are ye not content with having injuriously usurped immense tracts and innumerable woods, spite of the vain opposition of our ancestors? Should any one of *us* attempt *your* domains, would he return alive? No: and we will imitate your example. If, therefore, you are wise, if life is dear to you,—haste away,—advise your countrymen cau-

tiously to shun our woods, unless they would be the cause of their own deaths." During this menacing speech the Spaniard remained silent, pale with expectation of the mortal stroke. To save his life, he offered, with a trembling hand, knives, axes, garments and other trifles within his reach; pacified by which the savage returned to his comrades who lurked hard by. The Spaniard, deeming any stay in these quarters extremely perilous, ran off, leaving, to its own fate, many thousand pounds of ready made tea.

I shall here record another excursion to the savages, which, though completed in less time than the former, was productive of more advantage. A company of Spaniards were employed in preparing the herb of Paraguay on the southern banks of the river Empalado. The trees from which these leaves were plucked failing, they commissioned three men to seek for the tree in request beyond the river. By accident they lit upon a hovel and a field of maize, from which they falsely conjectured that the wood was full of savage hordes. This occurrence affected them all with such fear, that, suspending the business upon which they were engaged, they kept within their huts, like snails in their shells, and spent day and night in dread of hostile aggression. To deliver them from this state of fear, a messenger was sent to St. Joachim,

requiring us to search for the savages abiding there, and to remove them, when found, to our colony, I applied myself to the task without shrinking, and on the day of St. John, the Evangelist commenced my travels, accompanied by forty Indians. Having taken a guide from the Spanish hut, and crossed the river Empalado, we carefully explored all the woods and the banks of the river Monday-miri, and discovering at length, on the third day, a human footstep, we traced it to a little dwelling, where an old woman with her son and daughter, a youth and maiden of twenty and fifteen years of age, had lived many years. Being asked where the other Indians were to be found, the mother replied that no mortal besides herself and her two children survived in these woods; that all the rest, who had occupied this neighbourhood, had died long ago of the small-pox. Perceiving me doubtful as to the correctness of her statement, the son observed, "You may credit my mother in her assertion without scruple; for I myself have traversed these woods far and near in search of a wife, but could never meet with a single human being." Nature had taught the young savage that it was not lawful to marry his sister. I exhorted the old mother to migrate as fast as possible to my town, promising that both she and her children should be more

comfortably situated. She declared herself willing to accept my invitation, to which there was only one objection. "I have," says she, "three boars which have been tamed from their earliest age. They follow us wherever we go, and I am afraid, if they are exposed to the sun in a dry plain, unshaded by trees, they will immediately perish." "Pray be no longer anxious on this account," replied I; "depend upon it I shall treat these dear little animals with due kindness. When the sun is hot, we will find shade wherever we are. Lakes, rivers, or marshes will be always at hand to cool your favourites." Induced by these promises, she agreed to go with us. And setting out the next day we reached the town in safety on the first of January. And now it will be proper to give a cursory account of the mother and her offspring. Their hut consisted of the branches of the palm-tree, their drink of muddy water. Fruits, antas, fawns, rabbits, and various birds, maize, and the roots of the *mandiò* tree afforded them food; a cloth woven of the leaves of the *caraquatà*, their bed and clothing. They delighted in honey, which abounds in the hollow trees of the forest. The smoke of tobacco the old woman inhaled, night and day, through the reed to which was affixed a little wooden vessel, like a pan. The son constantly chewed

tobacco leaves reduced to powder. Shells sharpened at a stone or split reeds served them for knives. The youth, who catered for his mother and sister, carried in his belt two pieces of iron, the fragment of some old broken knife, about as broad and long as a man's thumb, inserted in a wooden handle, and bound round with wax and thread. With this instrument he used to fashion arrows with great elegance, make wooden gins to take antas, perforate trees which seemed likely to contain honey, and perform other things of this kind. There being no clay to make pots of, they had fed, all their lives, on roasted meat instead of boiled. The leaves of the herb of Paraguay they only steeped in cold water, having no vessel to boil it in. To show how scanty their household furniture was, mention must be made of their clothes. The youth wore a cloak of the thread of the caraquatà, reaching from his shoulders to his knees, his middle being girded with little cords, from which hung a gourd full of the tobacco dust which he chewed. A net of coarser thread was the mother's bed by night and her only garment by day. The girl in like manner wore a short net by day in which she slept at night. This appearing to me too transparent, I gave her a cotton towel to cover her more effectually. The girl folding up the linen

cloth into many folds, placed it on her head to defend her from the heat of the sun, but at the desire of the Indians wrapped it round her. I made the youth, too, wear some linen wrappers, which in my journey I had worn round my head as a defence against the gnats. Before this, he had climbed the highest trees like a monkey to pluck from thence food for his pigs, but his bandages impeded him like fetters, so that he could scarcely move a step. In such extreme need, in such penury I found them, experiencing the rigours of ancient anchorites, without discontent, vexation, or disease.

My three wood Indians wore their hair dishevelled, cropped, and without a bandage. The youth neither had his lip perforated, nor his head crowned with parrot feathers. The mother and daughter had no ear-rings, though the former wore round her neck a cord from which depended a small heavy piece of wood, of a pyramidal shape, so that by their mutual collision they made a noise at every step. At first sight I asked the old woman whether she used this jingling necklace to frighten away the gnats; and I afterwards substituted a string of beautifully coloured glass-beads, in place of these wooden weights. The mother and son were tall and well-looking, but the daughter had so fair and elegant a countenance, that a

poet would have taken her for one of the nymphs or dryads, and any European might safely call her beautiful. She united a becoming cheerfulness with great courtesy, and did not seem at all alarmed at our arrival, but the rather enlivened. She laughed heartily at *our* Guarany, and we, on the other hand, at *her's*. For as this insulated family had no intercourse with any but themselves, their language was most ridiculously corrupted. The youth had never seen a female except his mother and sister, nor any male but his father. The girl had seen no woman but her mother nor any man but her brother, her father having been torn to pieces by a tiger before she was born. To gather the fruits that grew on the ground or on the trees, and wood for fuel, the dexterous girl ran over the forest tangled as it was with underwood, reeds, and brambles, by which she had her feet wretchedly scratched. Not to go unattended, she commonly had a little parrot on her shoulder, and a small monkey on her arm, unterrified by the tigers that haunt that neighbourhood. The new proselytes were quickly clothed in the town, and served with the daily allowance of food before the rest. I also took care they should take frequent excursions to the neighbouring woods, to enjoy the shade and pleasant freshness of the trees, to which they

had been accustomed. For we found by experience, that savages removed to towns often waste away from the change of food and air, and from the heat of the sun, which powerfully affects their frames, accustomed, as they have been from infancy, to moist, cool, shady groves. The same was the fate of the mother, son, and daughter in our town. A few weeks after their arrival they were afflicted with a universal heaviness and rheum, to which succeeded a pain in the eyes and ears, and, not long after, deafness. Lowness of spirits, and disgust to food at length wasted their strength to such a degree that an incurable consumption followed. After languishing some months, the old mother, who had been properly instructed in the Christian religion and baptized, delivered up her spirit, with a mind so calm, so acquiescent with the divine will, that I cannot doubt but that she entered into a blessed immortality. The girl, who had entered the town full of health and beauty, soon lost all resemblance to herself. Enfeebled, withering by degrees like a flower, her bones hardly holding together, she at length followed her mother to the grave, and, if I be not much deceived, to Heaven. Her brother still surviving was attacked by the same malady that proved fatal to his mother and sister, but being of a stronger constitution overcame

it. The measles, which made great havoc in the town, left him so confirmed in health that there seemed nothing to be feared in regard to him. He was of a cheerful disposition, went to church regularly, learnt the doctrines of Christianity with diligence, was gentle and compliant to all, and in every thing discovered marks of future excellence. Nevertheless, to put his perseverance to the proof, I thought it best to delay his baptism a little. At this time an Indian Christian, a good man and rich in land, who, at my orders, had received this catechumen into his house, came to me and said, "My father, our wood Indian is in perfect health of body, but seems to have gone a little astray in mind: he makes no complaints, but says that sleep has deserted him, his mother and sister appearing to him every night in a vision, saying, in a friendly tone, 'Suffer thyself, I pray thee, to be baptized. We shall return to take thee away, when thou dost not expect it.' This vision, he says, takes away his sleep." "Tell him," answered I, "to be of good heart, for that the melancholy remembrance of his mother and sister, with whom he has lived all his life, is the probable cause of these dreams, and that they, as I think, are gone to Heaven, and have nothing more to do with this world." A few days after, the same

Indian returns, giving the same account as before, and with confirmed suspicions respecting the fearful delirium of our new Christian. Suspecting there was something in it, I immediately hastened to his house, and found him sitting. On my enquiring how he felt himself, "Well," he replied, smiling, "and entirely free from pain;" but added, "that he got no sleep at night owing to the appearance of his mother and sister, admonishing him to hasten his baptism, and threatening to take him away unexpectedly. He told me over and over again, with his usual unreservedness, that this prevented him from getting any rest. I thought it probable that this was a mere dream, and worthy, on that account, of neglect. Mindful, however, that dreams have often been divine admonitions and the oracles of God, as appears from Holy Writ, it seemed advisable, in a matter of such moment, to consult both the security and tranquillity of the catechumen. Being assured of his constancy, and of his acquaintance with the chief heads of religion by previous interrogatories, I soon after baptized him with the name of Lewis. This I did on the 23d of June, the eve of St. John, about the hour of ten in the morning. On the evening of the same day, without a symptom of disease or apoplexy, he quietly expired.

This event, a fact well known to the whole town, and which I am ready to attest on oath, astonished every one. I leave my reader to form his own opinion; but in my mind I could never deem the circumstance merely accidental. To the exceeding compassion of the Almighty I attribute it that these three Indians were discovered by me in the unknown recesses of the woods; that they so promptly complied with my exhortations to enter my town, and embrace Christianity; and that they closed their lives after receiving baptism. The remembrance of my expedition to the river Empalado, though attended with so many hardships and dangers, is still most grateful to my heart, inasmuch as it proved highly fortunate to the three wood Indians and advantageous to the Spaniards. These last, having been certified by me, that, upon the immense tracts of woodland here mentioned, not a vestige of the savages remained, collected, during the three years they stayed, many hundred thousand pounds of the herb of Paraguay, from which they derived an amazing profit. Thus much on the Guarany towns of Taruma. If on this subject I appear to have written too much, let the reader be told that I have passed over many memorable things in silence.

The most recent colony in the jurisdiction of

Paraguay, called Belen, is situated on the banks of the Ypaneguazù, to the north of Asumpcion. It was built in 1760 for Indians of the savagest kind, called Guaycurus or Mbayas. They are very expert horsemen, large and generally tall, hostile in the highest degree to the Spaniards, full of the absurdest superstition and arrogance, and, as appears from their clothing and manners, ignorant of the very name of modesty. Their only care is that of their horses and arms, in the management of which their skill is admirable. War, or more correctly pillage, is the occupation they reckon most honourable. In 1745, they laid waste the lands of Paraguay, with exceeding pertinacity. The greater part of the province was more employed in regretting the slaughters and the rapine, than in preventing them, nor could they devise any remedy for the evil. The soldiers were now baffled by their swiftness, now unexpectedly surprized by their designs, and now discomfited by their powerful assaults. The savages, elated by the daily victories they had gained for many years, could neither be restrained by the arms of the Spaniards nor appeased by fair words. At last, in the sixteenth year of the present century, the desired peace was at length brought about, and a colony founded in the place above-mentioned. To

found and govern this, Father Joseph Sanchez Labrador was happily chosen. He spared no labour in learning the difficult language of the savages, and in bringing them round to civilization and christianity, both by daily instruction and by kindness. Would that the Father's diligence and patience had obtained a corresponding reward! The little grandson of the Cacique Epaguini, who presided over the colony, many infants, and, some adults whose lives were despaired of, received baptism; but the rest did little else than wander over the plains. Their fidelity, however, seems above all praise; for, after the conclusion of the peace, they never formed any design hostile to the Spaniards, who, whilst they feared the Mbayas as enemies, and remembered the slaughter they had sustained, promised mountains of gold for the maintenance of their colony; but when their fears subsided, they began to supply them sparingly, or at least tardily, with those things deemed necessary for living in a town, so that the proselytes would have died of hunger had not the fruit of the palm-tree and wild animals supplied the want of beef. Countless and incredible are the labours, cares, hardships, and perils even of their lives, with which Father Joseph Sanchez and his companions, Juan Garzia, and Manuel Duran, were harassed for

many years. Duran, the person last named, was intended to begin a new colony for the Guañas or Chañas, a pedestrian tribe, subject to the Mbayas, exceedingly numerous on both sides the Paraguay. Being skilful agriculturists, they have already begun to cultivate the grounds and to raise themselves crops on the eastern shore of the Paraguay. In a soil so fertile, so opportune for the discovery of new nations, great progress in the Christian cause was expected from this docile, and populous nation. But he who had long employed himself in the foundation of the colony, when, with incredible labour, he had collected the necessaries for its preservation and completion, was summoned with his associates back to Europe.

Having now mentioned the Indian colonies within the domains of Paraguay, we will proceed to the other peculiarities of the province.

Notwithstanding the heat of the climate, the soil of Paraguay abounds in the most useful productions: cotton, the sugar cane, tobacco, honey, maize, mandioc, various kinds of pulse, potatoes of different sorts, medicinal plants, colours, frankincense, divers species of gums, balsams, palms, towering cedars, and other trees, both those that bear fruit, and those that serve for building of ships, houses, and waggons; it

moreover abounds in horses, mules, oxen, and sheep. There is no vestige of metals or precious stones in this country, as the early Spaniards imagined. Parrots, monkeys of various kinds, antas, stags, deer, tamanduas, tigers, and lions: choice fish, emus, partridges, dogs, crocodiles, capibaris, and huge tortoises, are every where to be found in astonishing numbers. The countless myriads of serpents, snakes, ants, and other reptiles and insects, evidently noxious, we shall fully treat of hereafter. The production peculiar to this province, and consequently by much the most profitable, is the Herb of Paraguay; of the production, preparation, nature, use, and price of which I am now going to treat.

The leaves cut from the tree *Caà*, and parched at a slow fire, got the name of the Herb of Paraguay, from a sort of resemblance to the herb tea, which, like itself, is drunk infused in boiling water. The tree *caà* grows no where spontaneously but in woods about two hundred leagues from the city of Asumpcion. Like reeds, it thrives best in a moist swampy soil. In form and foliage, except that the leaves are softer, it resembles the orange tree, but far exceeds it in size. Its flowers are small and white, with a calyx composed of five leaflets. The seed is very like American pepper, except that

three or four small whitish, oblong kernels appear beneath the skin. The boughs, which are cut off from the trees with a bill, are parched for some time on beams laid cross-wise over the fire; after which the leaves, with the smaller twigs, are spread on the ground, and beat to powder with sticks. When prepared by this less laborious method, it is called *yerba de palos*, because it is composed of leaves and leaf-stems, and their fibres, which are in a certain degree woody. An *arroba* (which is twenty-five pounds) of this herb, is sold in the forest for nearly two German florins; in the city of Asumpcion, from the expense of carriage, the price is double. The *caà-miri* is sold at a double price, being prepared by our Guaranies, with more labour and accuracy; for they carefully separate and throw aside the leaf-stems and larger fibres. After parching the leaves at a slow fire, they pound them gently in a wooden mortar, taking care not to beat them too small. For the more entire they remain, the more taste and smell they possess; if pulverized very small, they lose both. *Caà-miri* signifies the small herb, being made by the Indian Guaranies of the tender parts of the leaves, the leaf-stems and all the particles of wood being excluded; it is not, however, reduced to powder, like that of the Spaniards. The herb, when properly prepared,

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exhales a very pleasant fragrance, without the admixture of any thing else; but if it be sprinkled with a little of the leaves or rind of the fruits of the *quabira miri*, the odour is doubled, the flavour improved, and the price increased. Add to this, that the herb is of a gummy nature, and in parching it, care must be taken that it be not overdried. Merchants, when they would try the quality of the herb, put a little of it into the palm of their hand, and blow upon it; when much of the herb flies off, they judge it to be too high dried, and deprived of juice and virtue; but when it adheres to the hand as if glued there by a natural gum, they value it highly. In consequence of the bitterness natural to the herb, it is drunk with sugar. The Indians, however, and the lower orders amongst the Spaniards, drink it unmingled with any thing. Though the *caà* is only found in the remotest parts of Paraguay towards the N. E., it affords a beverage not only to the Paraguayans, but to the Peruvians and the inhabitants of Chili, who never cease sipping it from morning to night. This nectar of Paraguay is relished by every rank, age, and sex, and is to them what chocolate, coffee, Chinese tea, and spirits are to other nations. The herb, after having been conveyed on mules from the remotest roads of Paraguay to the distant kingdoms of Peru and Chili, from

the difficulties of the journey, and the heavy tolls, which send great returns to the royal treasury, is sold at its journey's end, at a greatly increased price.

The vessel in which it is taken is made of a hide, or of a gourd split in half, and, amongst the higher orders, plated all round with silver. Into this vessel they put a common table spoonful of the herb, stir it up for some time with sugar and cold water, and then pour the hot water upon it. Many drop in the juice of a citron or lemon. The herb thus prepared is strained through a silver pipe, annexed to which is a little globe, finely punctured; this is done lest any particle of the herb, which is noxious to the stomach, should slip down the throat with the liquor. Others use a narrow wooden pipe or slender reed for this purpose. The Indians, who are not in the habit of straining it, often swallow unintentionally a quantity of the herb, green concrete balls of which are sometimes said to be found in the bowels of the deceased. However this may be, it is most certain, that the warm water in which the herb has been steeped too long, cannot be drunk with safety to the health. Water of this kind grows black, and is only used by ink makers to deepen the blackness of their ink.

The moderate use of this herb is wholesome

and beneficial in many ways. For when taken with caution, it acts as a diuretic, provokes a gentle perspiration, improves the appetite, speedily counteracts the languor arising from the burning climate, and assuages both hunger and thirst, especially if the herb be drunk with cold water without sugar. If any one wishes to perspire freely, he needs no drug: let him drink an infusion of this herb, as hot as possible, and then lie down. If his stomach appear in want of an emetic, he has only to take the same herb in tepid water. On the other hand, it cannot be doubted, that by the immoderate and almost hourly use of this potation, the stomach is weakened, and continual flatulence, with other diseases, brought on. I have known many of the lower Spaniards who never spoke ten words without applying their lips to the gourd containing the ready-made tea. If many topers in Europe waste their substance by an immoderate use of wine and other intoxicating liquors, there are no fewer in America who drink away their fortunes in potations of the herb of Paraguay.

In the remotest forests, many thousands of men are employed unceasingly in the preparation of this herb during every part of the year, and many thousands of oxen are annually consumed in these labours. But who shall num-

ber the multitude of mules, not only occupied in transporting the herb, but destroyed by the asperities and the length of the journey? Hence they who hire the labourers that collect the herb, who supply oxen, mules, and the various iron implements, seldom grow rich, and they who are hired for this business live amidst constant wretchedness. The merchants who import it into Peru and Chili are the only gainers, and their gains are immense. If in all Paraguay there are a few opulent men, they have amassed their wealth from dealing in the Herb of Paraguay, and in mules, which they export into Peru and Chili. The marketing of the other Paraguayrian productions is attended with infinite labour, and little or uncertain profit. I have often heard the Paraguayrians complain of the scarcity of the *caà* tree; but I must own their lamentations always appeared to me very ridiculous, when they themselves are the occasion of it. For when, after the usual manner, they ought only to cut off the boughs, for the sake of a readier profit they fell the trees themselves; this being very generally done, the trees are yearly diminished in great numbers. The Indians, more provident, only crop the superfluous and luxuriant boughs, the tree itself being left alive and uninjured for succeeding years.

To spare time, expense, and labour, we

planted the *caà* within sight of the Guarany Reductions, and from them, in a very short time, the largest forests have arisen. If the Spanish agriculturists would but imitate this piece of industry, how much would their fortunes be benefited! But the planting of woods of this kind requires art, and patience, and the labour of many hands. The seed of the *caà* being exceedingly glutinous, must be washed in water till that native gluten be thoroughly removed; which if you neglect, your time will be lost, and your hopes frustrated. The ground in which you mean to sow the prepared seed must be copiously drenched with water, and almost rendered muddy. These premises having been cautiously attended to, you may think yourself fortunate, if, at the end of four months, any sign of germination appear; the seed being sown very deep. While the plants are yet young, they must be transplanted, and set at great and equal distances, lest one impede and injure the other. A ditch, two feet deep and as many broad, must be dug, to receive and retain the rain water; and in the middle of each ditch the plants are to be placed singly. As long as the plants are tender, they must be defended against the hoar-frost and cutting south winds by a little thatched tent. This is moreover indisputable, that the trees which are planted and reared by human

care, never grow so high as those of nature's own setting in the forests. Those however which are planted and cultivated by us, in three or four years time produce a plenteous crop of leaves, so that the labour attending artificial woods is sufficiently repaid by the after-profit. Woods are likewise sown by various birds, which swallow with great avidity the seeds of the herb-tree; these being, by reason of their natural gluten, indigestible, pass through them, and falling into moist ground, become the daily origin of new trees, and gradually of forests.

I have often been asked, why the herb of Paraguay is never exported to Europe, and I have answered, on many accounts. In the first place, very little more is prepared than suffices the Americans. If, moreover, the Spaniards of Paraguay gasped after commerce and gain, they might export not only this herb, but many other profitable commodities. Their ships, especially in time of war, are few; their security none. Add to this, that in a few years it spoils, and losing its original fragrance smells like Russian shoe-leather; when in this state, it is used by the Paraguayrians to die cloth black. The Europeans, moreover, having never so much as tasted the herb, have no desire to fetch it from America, which they would certainly do, if acquainted with its virtues. Oh!

how I burn with resentment whenever I read that the Jesuits monopolize the herb of Paraguay! It has ever been free to all, without distinction, to sell as well as to drink this much spoken of herb. There is no part of the year that the Spaniards do not despatch to the cities of Corrientes, Santa Fé, and Buenos-Ayres, many thousand pounds of it, thence to be transported, in huge vessels, to the different ports of Tucuman, Peru, and Chili, not one of the Jesuits daring to arrogate the right of opposing them. The Indian Guaranies, inhabitants of the thirty-two Reductions which were under our administration, only make the herb *caà-miri*, selling it for the use of the higher orders. As the preparation of it is much more laborious, it is entirely neglected by the Spaniards, who confine themselves to the coarser herb *caà de palos;* and the quantity of herb annually sold by the Spaniards exceeds that disposed of by the Indians as much as the whole hand does the little finger. For the Guarany towns are not permitted by the laws to sell above a certain quantity; but the Spaniards are under no such restriction. In most parts of Paraguay there is no currency of money, and the herb is the usual medium of exchange. But of this trade we pay an annual poll-tax in the Guarany towns, and are besides obliged to fit out our churches, which are highly

ornamented, and procure for our Indians the necessary iron implements. Nor can the superintendents of colleges, who exchange the cattle of their estates, and other natural productions for the herb, and that again for implements, instead of money, be justly accounted herb-merchants. For the founders of the colleges did not leave estates paying rent, nor sums of money put out at interest, as is usual in Europe, but plains and cattle of various kinds, for the support of the members and the repairing of the dwellings and churches. The productions of the estates and plains are there in the place of money, with which necessaries are to be procured. This exchange, which, unless we preferred dying of want, was absolutely necessary, either ignorance or malice has designated trafficking. How many and how ridiculous are the clamours that have been raised against the Portugueze Jesuits by these lying pamphlets, because they sold sugar brought them from Brazil, when, in fact, they had received no other means of subsistence from the founders of their college!

We must now say something of the tobacco plant, in which the soil of Paraguay is very fertile. This is sown both in the plains and woods, and succeeds equally well in either, though some prefer the tobacco grown in woods. Its leaves, when dried a little in the air, and fastened into

bundles with a twig, are chewed by some, smoked by others, and by a very few taken in the form of snuff. For the higher ranks use the snuff made at Seville only, though the price of a pound is at least four Spanish crowns, and often still more in Paraguay. Certain it is that the Paraguayrian tobacco in fragrance falls short of that brought from Virginia, or the island of Cuba. The first leaves that ripen, in Paraguay, are very large, often exceeding an ell in length; those which are plucked afterwards decrease more and more. The smoke of the tobacco is generally inhaled without any tube or vessel, in the following manner:—A leaf, not perforated in any part, is squared, to the length and breadth of the middle finger. In the middle of this is laid another little leaf compressed by the finger, and rolled up, together with the exterior and larger one. Light one end of this, put the other into your mouth, and draw in the smoke. The Spaniards smoke their tobacco with more cleanness and less cost, carrying about with them a deposit of several of those folds, called *zigarros*, and lighting them at their pleasure. The common people roll up the tobacco, cut small, in a paper, or in a maize leaf, and light it; but that this smoke injures the human head is beyond a doubt. Not only the soldiers and sailors, and the common people, as in Ger-

many, but even the higher orders, often smoke tobacco.

In Brazil the Portugueze twist the tobacco leaf into ropes, which, prepared in different ways, are either used as snuff, or chewed or smoked. It is incredible how highly this Brazilian tobacco is extolled by medical men, and how eagerly it is sought by Europeans. The Spaniards themselves every year consume an astonishing quantity to provoke saliva. By the traffic in tobacco alone, many millions have been lost by the Spaniards to the Portugueze, the sole venders of an article in such demand. To restrain so great an annual exportation of money to foreigners, it was provided by the Catholic King Charles III. in the year 1765, that the Spanish and Indian Paraguayrians should henceforth prepare their tobacco in the manner of the Portugueze, as being no wise inferior to the Brazilian, and that it should be sold at the price fixed by the royal governours, the whole profits accruing to the royal treasury. The king's order was universally, though unwillingly complied with, the new manufacture costing them much labour, with little or no gain to the labourers. I will give you an account of the whole process;—The tobacco leaves are accounted ripe when their ends turn yellow, and wither, and are plucked before noon, as being

moister at that time. They are then suspended from reeds that they may dry a little, and remain some hours under the shade of a roof. The stem which runs through the middle of the leaf is either beaten down with a bat or removed entirely. The leaves thus prepared are twisted into ropes, by means of a wheel, and then rolled upon a cylindrical piece of wood. This cylinder, with its tobacco, is placed under the shade of a roof in such a manner that it may receive the heat of the sun, and yet not be touched by any of its rays. The tobacco, thus compressed spirally upon the cylinder, exudes a black, glutinous juice, which falls drop by drop into a hide placed underneath. This juice flows daily through, and in like manner is daily poured again upon the folds; and when the whole mass is thoroughly penetrated by the liquor, it will be necessary to roll the spiral folds daily back again from one cylinder to another. By this method, the lowest part of the tobacco nearest the first cylinder is transferred on the next to the surface, imbibes the juice equally, blackens, and grows rich like lard.[1] To effect this, the translation from one cylinder to another, and the sprinkling of the tobacco, must be diligently continued for many weeks. The sweetness of the smell will mark the completion of the process. To prevent its drying, it must be kept in

a moist place, apart from every thing which might taint it with any other smell. Tobacco prepared in this manner is chopped by the Portugueze into small pieces, which they roast in a new pot placed on the hot coals, and stirring them with a round stick, reduce them to the finest powder—the future delight of every nose in Portugal.

Thus, though the trade in the herb of Paraguay, in tobacco, cotton, and sugar, and the abundance of different fruits, might offer to the colonists of Paraguay manifold opportunities of acquiring wealth, yet very few opulent men are to be found. They have many means of wealth, but still more impediments. From the very infancy of this province to the present time, bloody seditions, civil wars, contentions, and pernicious enmities to the royal governours and bishops, have miserably diminished the riches of the Spaniards. Add to this, that the savage Guaycurus, Lenguas, Mocobios, Tobas, Abipones, and Mbayas, wretchedly wasted the province with massacres and pillage, without leaving the miserable inhabitants a place to breathe in, or the means of resistance. To elude their designs, little fortlets are every where erected on the banks of the Paraguay, fitted up with a single cannon, which, being discharged whenever the savages come in sight, admonishes the

neighbours to fight or fly, according to circumstances. The fortlets not being very far distant from one another, the repeated explosions of guns quickly signifies the approach of an enemy descried from afar, to the metropolis itself. As this province is destitute of a regular soldiery, the settlers themselves are ordered sometimes to watch in these fortlets, sometimes to march against the savages. Being every year pressed for some months with the burdens of the militia, they are forced, during frequent and long absences, to neglect their substance, their families, their agriculture, and their commerce. In this you may see the chief origin of their poverty. Besides the equestrian savages, who is ignorant of the calamities brought upon this province by the barbarous Payaguas? These atrocious pirates, infesting the rivers Paraguay and Parana, had for many years been in the habit of intercepting Spanish vessels freighted with wares for the port of Buenos-Ayres, or conveying them from thence, and of massacring the crews. At length Raphael de la Moneda, the royal governour, repressed the audacity of these pirates, and after repeated successful excursions along the river, obliged them to crave a peace, of which their living quietly on the shore of the Paraguay within sight of the city of Asumpcion, was a principal condition. For many

years they have kept to the convention; but no persuasions of the bishops, the governours, or the priests, could ever prevail upon them to embrace our religion. They are tall, and extremely muscular. The frightful appearance which nature has given them they increase with adscititious ornaments. In the under lip, which is perforated, they fix a long tube, sometimes of wood, sometimes of shining copper, reaching down to the breast. To the flap of one of their ears they tie the wing of a huge vulture. Their hair is stained with a purple juice, or with the blood of oxen. On their neck, their arms, and the calves of their legs, they wear strings of glass beads. They paint the whole body from head to foot with a variety of colours. The females, of every age, are decently covered with woollen garments woven by themselves. The males think themselves handsomely arrayed if they be elegantly painted; and formerly frequented both their own settlement, and the Spanish city and houses, in a state of complete nakedness; which being considered offensive to Christian decency by the governour Raphael de la Moneda, he provided that a quantity of coarse cotton should be distributed amongst the adult savages, with this edict, that if any of them thenceforth entered the city naked, he should be punished at the pillory in the market-place with fifty strokes. One

of them had brought fish to the house of a Spanish matron to sell, in exchange for which he received a fruit called *mandubi*. Having no sack to put them in, he held them in the bottom of his garment lifted up as high as the loins. On departing, when he had reached the door of the room, he began to think within himself that this mode of proceeding would be punished by the governour with a public whipping, if he should hear of it. Alarmed by this consideration, he returns to the matron, repeats the word *Moneda*, with his finger in a threatening attitude, and having let down the fore part of his garment, pours the fruit on the ground, puts them into the hind part, and joyfully carries them off; thinking that by this method he might walk through the market-place decently and unpunished. They use their own language, though, from their constant intercourse with the Spaniards, the majority can stammer a little Spanish and Guarany. They abound in nuptial, funeral, natal, and military rites, and in the absurdest superstitions. Their weapons are a bow and arrows, long spears, and a club; but their craft is more formidable than their arms. Each family has its canoe, a narrow one indeed, but very long. They are managed with a single oar, pointed at the end like a sword, and fly at the slightest impulse in any direction. Their

velocity is owing to their structure. The keel touches the water for little more than three palms in the middle; the remainder, towards the prow and poop, is curved like a bow, and rises out of the water. Both ends of the canoe are sharp alike, and either serves for poop or prow, as seems good. When the river is stormiest, they trust themselves and their families, without fear, to its waves. If ever the boat is upset by an unusually strong wave, which happens but seldom, the Payagua gets astride the boat, and thus pursues his way. How often, from the shore, have I beheld the Payagua struggling and laughing amid the foaming waves of the tumultuous river, and expected every moment to see him swallowed up by the eddying waters! They plunge into the lowest depths of the water, and after remaining under a surprising time, emerge at an immense distance, loaden with fish. They have two sorts of canoes; the lesser for fishing and daily voyages, the larger for the uses of war. These latter will hold forty warriors. If their designs be against the Spaniards, many of them join together in one fleet, and are the more dangerous from their drawing so little water, which enables them to lurk within the shelter of the lesser rivers, or islands, till a favourable opportunity presents itself of pillaging loaden vessels, or of disembarking and

attacking the colonies. These savages, though more like beasts than men in their outward appearance, do nevertheless in the contrivance of their designs discover amazing subtlety. For many years they continued to pillage the Spanish colonies, and all the ships that came in their way, from the city of Asumpcion, forty leagues southwards. To the cities of Asumpcion and Corrientes, to the vicinity of Buenos-Ayres, and to the Guarany and Spanish towns, I appeal as witnesses. Heaps of dead bodies, crowds of boys and girls driven away, houses reduced to ashes, wares, and all kinds of precious furniture carried off, and churches laid waste—these are the monuments of the barbarous ferocity of these pirates: documents of their deceit yet fresh in the memory of man, on my coming into Paraguay. Many tribes of Payaguas yet remain, who, though bound by no tie of friendship to the Spaniards, cause them no apprehension, because they live remote from the city of Asumpcion, on the northern parts of the Paraguay, and on the shores of the rivers flowing into it, which the Spaniards seldom visit. But the Portugueze who dwell in Cayaba are sometimes taken, and sometimes slain by Payaguas still practising piracy.

To the royal jurisdictions of Buenos-Ayres and Rio de la Plata, of Tucuman and Asumpcion,

must be added a region named Chaco. Its length is 300 leagues, its breadth 100. Tucuman, the region De las Charcas, Santa Cruz de la Sierra, and the rivers De la Plata and Paraguay surround Chaco; on both sides it is bounded by the mountains which stretch from Cordoba to the Peruvian silver mines at the cities of Lipes and Potosi, thence to Santa Cruz de la Sierra, and lastly to the lake Mamoré, where they terminate. This territory, throughout its whole extent, enjoys a salubrious climate, and a rich fertile soil. Here it gently swells into pleasant hillocks, there sinks into fertile vallies, affording rich pasturage to horses and cattle of all kinds. It is adorned with woods, and a variety of excellent trees. On the Peruvian side, stones and rocks that seem to threaten the skies, cover immense tracts of land. Towards the south, it is utterly destitute of stones, pebbles, or sand, though you dig to the depth of fourteen feet. Incredible multitudes of strange beasts, birds, amphibious animals, and fishes present themselves to the eye. Besides lakes and rivulets, the ground is watered by noble rivers, which overflow the banks and inundate the sloping plains to a great extent. The most considerable stream in Chaco is the Rio Grande, or Vermejo, which has its source in the Peruvian mountains, and is increased by the accession of many rivers, till it shortly be-

comes navigable for small ships. It flows down in a very deep channel, with the most rapid course; washes the cities of Guadalcazar and Concepcion, long since devastated by the savages, and at about thirty leagues distance from thence, mingles its waters with the Paraguay, a little before its junction with the Parana. The waters of the Rio Grande, which abound in fish, are pronounced by authors to be salubrious, especially to those who labour under a difficulty of urine, or any disease of the bladder. The second place to this river is occupied by the Pilcomayo, which also flows from the Peruvian mountains. The distance between it and the Rio Grande is reckoned at thirty leagues. It is not navigable at all times, nor in all places. Nearly eighty leagues from its junction with the Paraguay, it splits into two arms, forming an island of as many leagues in length. The first of these arms which flows into the Paraguay, within sight of Asumpcion, is called by the Guaranies *Araguaaÿ*, or the wise river; possibly because the greatest sagacity is requisite to effect its navigation. The whole island is annually flooded, so that both branches of the river coalescing into one channel, it must be attributed to fortune, rather than to skill, if any pilot pass over the opposing shallows, and the meanders of its waters in safety.

The other arm, which retains the name of *Pilcomayo*, unites with the Paraguay at about the distance of nine leagues to the south of Asumpcion. The waters of the Pilcomayo are, for the most part, extremely foul.

The Rio Salado derives its origin from the mountains of Salta. In sundry places it changes both its channel and its name. At first it is called Rio Arias, presently Rio Passage, and afterwards, in the neighbourhood of the castle de Val Buena, Rio Salado. Beyond the city of Santa Fè, it assumes the name of Coronda, and finally, under this name, loses itself in the mighty waters of the Parana. For a length of way, its waters are not only sweet, but very famous for their salubrity, which, however, tributary lakes and rivers corrupt with such filth and saltness, that, for the space of many leagues, the very beasts refuse to touch it. It may be worth while to notice the origin of its saltness. The neighbouring plains abound in the shrub *vidriera*, the ashes of which reduced to a calx are employed in the making of glass. The *vidriera* resembles the juniper; the berries are small and cylindrical, green, nearly transparent, and joined one with another, being in place both of boughs and leaves. If I remember rightly, it bears no fruit. The rain falling

upon these shrubs, contracts a saltness, and flowing down the country, communicates it to the lakes and streams, which enter rivers sweet at their source, and miserably taint them. The palm tree *(carandaÿ)* under which salt-petre is produced, has the same effect as the *vidriera.* But though the waters of the Rio Salado be salt, they are pellucid, and in the deepest parts the excellent fish, with which this river abounds, are perceptible at the bottom. Its channel is deep, and contained within narrow, though lofty and precipitous banks, through which it quietly flows, unnavigable, except near Santa Fè. Between the Salado and Dulce flows the rivulet Turugon, which, being girt with woods, even in the driest weather, affords plentiful and sweet waters to the traveller, as it is neither interrupted by shallows, nor tainted with salt. It is not far distant from the little Indian town Salabina. The Rio Dulce, which is the Nile of the territory of St. Iago, after proceeding a little southerly, overflows its banks, and is finally received by the lake of gourds (Laguna de los Porrongos) between Cordoba and Santa Fè. Not many leagues distant is the white lake, (Laguna Blanca,) where the Indians and Spaniards affirm that howlings, as of bulls, are heard in the dead of the night.

The rivers and streams of lesser note which

belong to Chaco, are the Centa, the Ocloyas, the Jujuy, the Sinancas, the Rio Negro, the Rio Verde, the Atopehenra Lauate, the Rio Rey or Ychimaye, the Malabrigo or Neboque Latèl, the Inespin or Naraheguem, the Eleya, &c.; who shall number them all, when they are almost innumerable, and often unnamed? Most of these, after a long drought, become almost dry, a no uncommon occurrence in Chaco. You may often travel many leagues where not even a bird could discover a drop of water. On the other hand, when the sky is prodigal of its hoard, the brooks seem rivers, and the rivers seas, whole plains being inundated. During many journies of many weeks, when we had to contend with water, mud, and deep marshes, there was often not a palm of dry land where we could rest at night. The Spanish soldiers who were with me sometimes ascended high trees, and perching there, like birds, enjoyed some portion of rest during the night. Several of them lighted a fire there to heat their water. But the calamity was far more intolerable when we had to ride, without resting day or night, for many leagues, under a burning sun, before we reached a situation where we could obtain water for ourselves and our horses. At other places, you might traverse immense plains without seeing a twig to light a fire with.

Wherever you turn, you meet with an army of gnats, serpents, and noxious insects, besides lions, tigers, and other formidable wild beasts.

This is the face of the province called Chaco! which the Spanish soldiers look upon as a theatre of misery, and the savages as their Palestine and Elysium. Hither the Indians fled, when the Spaniards first laid the yoke on the inhabitants of Peru. To escape the dreadful hands, nay the very sight of the Europeans, they betook themselves to the coverts of Chaco. For there they had mountains for observatories, trackless woods for fortifications, rivers and marshes for ditches, and plantations of fruit trees for storehouses; and there a numerous population still eludes the attempts of the Spaniards. It appears very probable, that these lurking-places in Chaco were tenanted by indigenous tribes, prior to the arrival of the Spaniards; and if so, it is indubitable that the new arrivers joined themselves to the natives, in the hope of security. Several tribes formerly existed in Chaco, but of these the names alone, or very slender relics remain. Of this number were the Calchaquis, formerly very numerous, famous for military ferocity, and hostile to the Spaniards. At present, a very few survive in a corner of the territory of Santa Fè, the rest having long since fallen victims to war, or the

small-pox. Nearly the same fate has swept away the equestrian tribes of the Malbalaes, Mataras, Palomos, Mogosnas, Orejones, Aquilotes, Churumates, Ojotades, Tanos, Quamalcas, &c. The equestrian nations remaining in Chaco, and still formidable to the Spaniards, are the Abipones, Natekebits, Tobas, Amokebits, Mocobios, Yapitalakas, or Zapitalakas, and Oekakakalots, Guaycurus, or Lenguas. The Mbayas dwelling on the eastern shore of the Paraguay call themselves Eyiguayegis, those on the western Quetiadegodis. The pedestrian tribes are the Lules, the Ysistines Foxistines, who speak the same language, to wit the Tonocotè, and have been, for the most part, converted by us, and settled in towns: the Homoampas, Vilelas, Chunipies, Yooks, Ocoles, and Pazaines, who are in great part Christians: the Mataguayos, whom we have so often attempted to civilize, but who always proved indocile: the Payaguas, the Guanas, and the Chiquitos. By the annual excursions of men of our order to the woods, savages speaking various languages, as the Zamucós, Caypotades, Ygaronos, &c. were added to the colonies of the Chiquitos.

The Chiriguanos, a nation very famous for number, fierceness and obstinacy, can scarcely, I think, be referred to Chaco, as the majority of them inhabit the territories of Tarija and Peru,

Their language, which is somewhat remarkable, is a dialect of the Guarany, very little corrupted. Tradition reports, that they formerly migrated from the southern shores of the Parana and the Paraguay, to these northern tracts of Peru, through fear of the vengeance which threatened them from the Portugueze, for having murdered their countryman Alexo Garzia. This cause of their migration some reject, and contend that near a hundred years before the murder of Alexo Garzia, they had been attacked, but not vanquished, by the Inca Yupangui. This is, at any rate, most certain, that the Chiriguanos, except a few who now profess Christianity, are, at this day, hostile to the Spaniards, and formidable to the whole neighbourhood far and wide.

I shall here cursorily mention the other nations yet remaining in Paraguay, without the limits of Chaco: the Guaranies, by far the most numerous of all, inhabiting thirty-two large towns, on the shores of the Parana, Paraguay, and Uruguay, and all of them sincerely attached to the King, and the Catholic Faith; as also the Ytatinguas, who occupy two colonies in the woods of Taruma. Other little towns, also, administered by secular Presbyters, or Franciscans, are inhabited by Christian Guaranies. The Tobatinguas, Tapes, and Caayguas, still

hidden in the coverts of woods, have assumed these names from the mountains, rivers, or forests which they tenant, but are in reality Guaranies, and use the Guarany tongue. The Guayaguis are a populous nation, entirely different from the Guaranies in language, customs, and fairness of complexion. They wander over the remote forests on the banks of the Mondaÿ-guazù. They leap from tree to tree, like monkies, in search of honey, little birds, and other provision. Destitute of clothing and settled habitations, a timid race, they pass their lives without injuring any one. On the craggy rocks overhanging the river Tebiguary Miri, and the little city Villa Rica, dwells a race of savages, called by the Spaniards Guaycuruti, from the fairness of their faces; men tall of stature, and armed with a club, and arrows. Troops of these occasionally descend into the plain beneath their mountains, and with their missiles or clubs kill the mules and horses of the Spaniards, and cutting them into pieces, transport them on their shoulders, and feast most luxuriously upon them at home. When, therefore, this carnage of horses and mules had brought devastation on the Spanish estates, it was unanimously agreed to examine the lurking-places of the savages, and either lead them away captive, or cut them off by massacre. The expedition was weighty,

but brief. For on the very first day, some unaccountable panic induced them to return. To these horse-eaters I join the Indian man-eaters, who wander in the woods between the rivers Parana and Uruguay, as also on the shores of the Mondaÿ-guazù, and Acaraÿ, constantly intent on the chase of men, whose flesh they infinitely prefer to that of any beast. They have been sought after by men of our order, often with great hardships, often at the peril of their lives, but always in vain. The extensive plains, the forest labyrinths, the difficult recesses of the Yguazu, Ygatimi, Carema, Curyi, Acaray, Monday, &c. abound in hives of wood Indians, who, though differently named, according to the places where they reside, may in general be referred to the Guarany nation.

Among the equestrian nations out of Chaco, the first place is held by the Guenoas, who reside between the rivers Uruguay and Plata, and the Pacific Ocean, without, however, having any fixed settlements. This very numerous nation comprehends the Charruas, the Yaros, Bohanes, Minoanes, and Costeros, all horsemen, and of the most barbarous manners. These savages, as dwelling nearest the Rio de la Plata, and being, as it were, the door-keepers of all Paraguay, have ever given the most trouble to the new arrivers from Spain, to whom they are

hostile in the highest degree. In 1750, the soldiers of Santa Fé, to revenge their frequent violation of the stipulated peace, surprized the perfidious Charruas, about morning, as they were sleeping in their tents. Many were slain, and the rest led into captivity with their families. On the western shore of the Parana, a village was built for them, about twenty leagues distant from the city, a priest given them to instruct them in religion and humanity, and a guard of soldiers added to secure his personal safety, and prevent their flight. The savages were chiefly supported by the flesh of wild horses, with which the neighbouring plains are overrun. Tamed by hunger and misery, the Charruas applied themselves to agriculture, and yielded conformity to their priest, who, fearing nothing farther for his own security, and that of the colony, desired that the soldiers might be removed, as he found their presence totally useless to himself, and extremely prejudicial to his proselytes. This good man, who was a Franciscan, knew that he should lose both cost and labour, if the Indians observed the manners and discourse of the soldiers incongruous with the precepts issued from the church. On the fear of hostile aggression, soldiers are sometimes sent from the city for the defence of a new colony; but we dreaded the coming of the soldiers,

more than that of the savages. For the former by their licentiousness do more harm to the women, than the savages could do to the colony with all their weapons. About the end of the last century, men of our order, by their eloquence and kindness, so far brought over the barbarous Yaros, who form a large part of the Quenoas, that, collected in a little town dedicated to St. Andrew, they suffered themselves, for some time, to be instructed in religion; but at the instigation of a certain famous juggler, they returned to their old haunts. Being asked the cause of their flight, "We don't like," said they, "to have a God who knows and sees all we do in secret. It is our fixed resolve and pleasure to enjoy our old liberty of thinking and acting as we like." The massacres committed by these worst of savages, in the territories of Corrientes, Santa Fé, and Monte-Video, alike exceed belief and calculation.

That immense plain which stretches out to the south west of Buenos-Ayres, is inhabited by equestrian savages. They have not all the same name or language. By the Spaniards they are either called Pampas,—dwellers in champaigne country; or Serranos,—mountaineers. From the Indians of Peru, they receive the general name of Aucas, to wit, enemies, or rebels. In reality, however, they

are divided into Puelches, Peguenches, Thuelchùs, (whom we call Patagonians,) Sanguelches, Muluches, and Araucanos, the masters of the Chili Alps. Horrible names!—but far more horrible are the dispositions, deeds, manners and opinions of those who bear them. The country tenanted by these savages stretches an hundred leagues from north to south—from east to west full two hundred; is almost destitute of wood and water, but abounds in wild animals. Multitudes of emus wander over these solitudes. The horse supplies them with food, clothes, lodging, bed, arms, medicine, thread, and what not? Of the hide they make their couch, clothing, boots, tents, saddles, and thongs which serve alike for bridle and weapons. The sinews of the horse they use instead of thread, for the purposes of sewing. They drink melted horse-fat, and wash their heads, first with the blood of these animals, and afterwards with water, in the idea of its strengthening them. They twist horse-hair into ropes. They are terribly addicted to drunkenness, and expend their whole property in purchasing brandy from the Spaniards. When I resided in Buenos-Ayres, to sell this pestilent liquor was a crime, the absolution of which was reserved for the Bishop alone. For a single flagon of brandy, the young maid is often sold by her parents as

a wife to some savage suitor. As soon as the first potation is prepared of the alfaroba mixed in water, they flock to their burying-places, not without many ceremonies, and sprinkling them with this beverage, utter the tenderest lamentations, for pity that those entombed beneath cannot enjoy their nectar. In war, these savages are extremely formidable to the neighbouring Spaniards. Fleet horses, a sword, a spear, and three stone balls covered with leather, and suspended from as many thongs, which they hurl with great dexterity, are their weapons, and weapons by no means to be despised.

The Southern savages, when wrought to the highest pitch of bitterness, leave their enemy, mutilated in both feet, and writhing on the ground, like a worm, to the tortures of a protracted death. This is their most familiar threat, when angry. Those whom they despatch at a single blow, they think kindly and humanely treated. Actuated by an irrational kind of pity, they are wont to bury their dying ere the breath has left them, to shorten their pains. At other times, when they see a man struggling in the agonies of death, they paint him with various colours, and adorn him with blue beads. They compose the corpse in such a manner, that the knees touch the face. His

horses, ornamented with small copper bells, glass beads, and emu feathers, they lead round the tent of the deceased, for a certain number of times, after which they kill them. The same fate awaits his dogs. The bodies of the horses are fastened to the grave with stakes, from which are suspended many coloured garments. They believe that the souls both of men and emus inhabit subterraneous tents. See! what multitudes of nations are yet remaining in Paraguay! numerous others, moreover, whose names exist alone in histories and maps, have perished long since from various causes. Of this number are the Caracaras, Hastores, Ohomàs, Timbus, Caracoas, Napigues, Agazes, Itapurus, Urtuezes, Perabazones, Frentones, Aguilotes, &c.

In this place we may add, that within the ample confines of Paraguay, there is scarce known a single nation upon which the Jesuits have not bestowed their labours, and for which, whenever it was permitted, a colony was not founded. Above all, the nation of the Guaranies, though never to be vanquished by the arms of the Europeans, evinced such docility and obedience to the instructions of the Jesuits, and such submission to God and the Spanish monarchy, as could neither be gained nor expected from the other Americans. The Guaranies owe it to the exceeding benevolence of the

Spanish Kings, that they have ever sent them Jesuits from Europe to teach them religion, that they have liberally supported them, that the annual tribute exacted from them has been lightened, and that they have protected them against envy and calumny by their royal letters. No time can erase the memory of such benefits. No one, however, will deny that the Spaniards, on the other hand, owe much to the Guaranies educated under our discipline. They have been partakers in all the wars which the Spaniards have waged in Paraguay against foreign or domestic foes, and have had a great share of all their victories. Again and again have all the Indian nations secretly conspired to the destruction of the Spaniards. And doubtless so great a number of rebels must ultimately have triumphed over so small a band as the Spaniards, had not our Guaranies, embracing the royal party, strenuously opposed the arms and purposes of its opponents. From one instance which I shall produce, you may judge of the rest.

In the years 1665 and 1666, the Indians almost universally harboured designs of expelling the Spaniards from the whole province. Already were the torches of sedition and tumult scattered in every corner of Paraguay. The royal Governour Alphonso Sarmiento, alarmed by these rumours, hastened from Asumpcion,

with a little band of soldiers, to the town of Arecaya, about sixty leagues distant, situate on the banks of the Yeyuy; a place of the inhabitants of which he entertained some suspicions. The greater part of them were in a state of slavery to private Spaniards, and but little content with their lot. Pretending friendship, however, they received the Governour with honour, and he, suspecting no turbulence for the present, took up his quarters on the skirts of the town, in huts of boughs and straw. In the dead of the night the Indians surprized the Spaniards with every species of weapon, and cast fire upon their huts. Some of the Spaniards were slain and more wounded; most of their clothes were burnt, their gunpowder was exploded, and some of their guns were taken by the enemy. In the trepidation excited, the soldiers betook themselves to the neighbouring church, where they thought for a little while to remain in safety. But destitute of meat and drink they must have perished of thirst and famine. The holy water was converted into a remedy for their thirst. The enemy blockading the walls, they had no opportunity of escape, no means of obtaining provision. At last, the danger of the Governour and his comrades being told to the Guarany Ytatinguas in St. Ignacio and Nuestra Señora Santa Fè, Father Quesa, who

presided over both these colonies, set out immediately with about two hundred of his Indian horsemen, in the view of assisting the Governour. After travelling incessantly for twenty-four hours, they entered Arecaya, where the Indian rebels were slain or taken prisoners by the Christian Guaranies, and the Spaniards brought forth to freedom and security. Out of the company of Guaranies three horsemen were chosen to carry the Governour's letters to Asumpcion, in which he informed them of what had happened, and what steps must be taken for his own safety and that of the province. The court of Madrid was immediately apprized of the fidelity and zeal of the Guaranies, whom the Catholic King honoured with gracious letters, which are still preserved in the register of Nuestra Señora a Santa Fè. It appears from sufficient authority that a sedition raised by factious and warlike nations, with a view to the destruction of all the Spaniards, would have broken out had they not stood in awe of the strength and immutable fidelity of the Guarany nation towards the King. On this very account they were exposed to the hatred of the savages hostile to the Catholic King. The Guaycurus for many years harassed these two towns of the Ytatinguas, and compelled them, at length, to exchange their station for one surrounded by the

rivers Parana and Paraguay, where yet remain the posterity of those who aided the Spaniards endangered in Arecaya.

Concerning the ten towns of the Chiquitos I have spoken before. These Indians, formidable from their warlike courage and mortally poisoned arrows, whenever commanded by the royal Governours have uniformly proved brave and faithful fellow-soldiers to the Spaniards against the savages, and even against the Portugueze. Less in point of number, but highly consequential to the tranquillity of the whole province, have been the four cities of the Abipones, the two of Mocobios, one of Tobas, and another of Mbayas, warlike and equestrian nations. To these add the pedestrian nations, the Lules, Vilelas, Chiriguanos, Chunipies, Homoampas, &c. converted by us to the Roman rites and discipline in their own colonies. In language, manners, and religious observances, they differ amongst themselves; they are all, however, attached to agriculture.

Very many Indian towns have long since ceased to exist, sometimes from the inconstancy of the Indians sighing for their native land, sometimes from the malevolence, the avarice, or inertness of the Europeans. Father Joseph Labrador is my authority, that seventy-three towns of various Indians perished in the pro-

vince of Chaco. In the present age, by much labour of the Jesuits, three towns have arisen, at an immense expense, for the southern savages, the inhabitants of the Magellanic territory, all dedicated to the most holy mother of God. The first, named Concepcion, is inhabited by the Pampas, and acted as a defence to the inhabitants of Buenos-Ayres against the incursions of the savages. The rulers of the newly-built town, Father Matthias Strobl from the province of Austria, and Manuel Querini, a Venetian of noble family, were men of distinguished piety, prudence, and fortitude. Both Fathers possessed singular dexterity in managing the minds of the Indians. The neighbourhood of the city, and of the Spanish estates, where there was plenty of spirit and of bad example, incredibly retarded the conversion of the savages to a better way of life. The Serranos and Patagonians, who came backwards and forwards to visit the Pampas, won by the kindness of the Father, and taken by the conveniences of life which the inhabitants of the colonies enjoyed, began earnestly to desire a little town of this sort in their native soil. Their wishes were immediately gratified. Fathers Falconer and Cardiel, the one an Englishman of great skill in medicine, the other a Spaniard, and a man of an

ardent and intrepid mind, travelled to their savage wildernesses, and having felt the pulse of the people, looked about for an opportune situation, wherein to establish the intended colony. At length the town was built, and the Caciques Marike and Tschuan Tuya, with four-and-twenty hordesmen belonging to them, settled therein; it was named Nuestra Señora del Pilar. To govern this colony, Father Matthias Strobl, who knew a little of those languages, was removed thither by the mandate of the Superior. Though daily vicissitudes occurred, yet hopes of the happiest progress shone through them. But an unforeseen event almost proved fatal to the new raised colony. Thus it was: a murder happening to be committed in the territory of Buenos-Ayres, soldiers were sent by the Governour to detect the assassins. Cacique Yahati, a Serrano, accompanied by fifteen persons of both sexes, in travelling to the city, fell in with the soldiers, and without any foundation for the conjecture, was carried off on the suspicion of this murder, and kept closely confined in prison with his people in the city. With how incensed a mind the inhabitants of the town bore so great an injury done to their countryman, of whose innocence they felt assured, can scarcely be expressed. The life of Father Matthias Strobl was placed

in the most imminent danger. Cacique Marike, who, though blind in both eyes, possessed the greatest authority among them, was immediately delegated by the infuriated people to make the just demand of their captive's liberty from the Spanish Governour, and to declare instant war, in the name of the whole nation, against the Spaniards if he should refuse. This threat filled Joseph Andonaegui with distracting cares, conscious, as he was, of the slender forces he had to oppose to so numerous a foe. The examination of the murder being resumed, and the witnesses being heard again and again, the innocence of the imprisoned Cacique at length appeared, some credible Spaniards asserting, that at the very time when the murder was committed he was engaged in a certain shop in the city. Which being proved, after a causeless captivity of four months, they were immediately granted their liberty and the power of returning to their friends by the equitable Governour. These things fell out on my third visit to Buenos-Ayres, about the beginning of the year 1748. Through an Indian interpreter I had a good deal of conversation with the blind Cacique Marike, and on my playing to him in my chamber, on the viol d'amour, he took such a liking to me, that he earnestly entreated me to go to their colony, as an assistant to Father

Matthias Strobl, who was growing aged. Both my feet, I confess, itched for the journey; I answered, however, "Pleased indeed should I be to mount my horse, and accompany you to the Magellanic lands. But men of our profession cannot go where we will, except we be sent by the command of our captain, (the provincial.") "Where, pray, does your captain dwell?" eagerly inquired Marike. "In this very house," returned I. On hearing this he immediately caused himself to be led into our provincial's chamber, and with importunate but vain entreaties, begged me for his companion. The provincial replied, that I was now appointed to another station, but promised to send me in two years to his colony, and the provincial would have stood to his promise, had not my labours been needed amongst the Abipones.

On the departure of the captives from Buenos Ayres, the town was restored to its former tranquillity, and shortly after increased by new supplies of Patagonians. For these a single town was prepared, four leagues distant, and named Nuestra Señora de los Desamparados. The government of it was committed to Father Lorenzo Balda of Pampeluna, and to Father Augustino Vilert a Catalan. Three of the Patagonian Caciques, with eighty of their hordes-

men, occupied this colony. A horde consists of three or four families, sometimes of more. Each family generally numbers four, five, and often more heads; for the Patagonians have many children, and polygamy is very common amongst them. They are docile beyond all the other southern tribes, and make less opposition to baptism, but I cannot commend the young men of this nation either for honesty or modesty. Scarce any commerce is carried on between the Spaniards and Patagonians. From a nation so populous, so tractable, and of so gentle a disposition, great accessions were reasonably expected to Christianity, but Satan confounded all these fair hopes. Cangapol, the potentate of that region, long beheld these Christian colonies with gloomy and envious eyes. Through them he thought that friendships would be formed with the Spaniards, the freedom of the southern nations endangered, and his own power in these parts gradually diminished, and ultimately suppressed. Hence he turned his whole heart and thoughts to hastening the destruction of the new town, and the banishment of the Fathers who taught the strange religion. In order to effect these purposes, as many savages as possible were associated in a contract of arms, and an expedition was at length undertaken. Matthias Strobl, being made acquainted

with the route and immense number of the enemy, made a timely request by letter, to the Governour, for military succours from Buenos-Ayres, which city promised seventy provincial horsemen, but never supplied one. Thus having suffered a repulse from the Spaniards, whose interest it chiefly was to maintain these towns, by flying with his people, the Father eluded the enemy—eluded since he could not subdue. The towns, their flocks, and their herds were left. The neophytes and catechumens, all who were sincere in religion and friendly to the Spaniards, fled with the Fathers to the city of Concepcion. But this colony being daily harassed by hostile incursions, and but lazily defended by the Spanish guards, was entirely deserted on the 3d of February, 1753, a severe loss to the city. For the savages being now at full liberty to ravage where they would, the estates for two leagues distant from the city were presently left destitute of their guards, and the lands around the village of Magdalen, famous for large crops of wheat, of their cultivators, both having fled to safer quarters. In the city itself the most disgraceful trepidations often arose, sometimes from real danger, at others from the suspicion alone of an enemy. In the circumjacent estates and plains very many were despoiled of their substance, their cattle, and

their life, by the assaulting savages. The light-armed cavalry, who were commanded to keep watch in the country and repress the enemy, suffered repeated losses. Waggons laden with silver from Peru, were often despoiled of their treasures, the soldiers who guarded and transported them being miserably butchered. The same savages have often proved fatal, always formidable, to the inhabitants of Barragan, a bay of the Rio de la Plata, where vessels are often drawn out and refitted. Those who went southward in great numbers for salt to the salt-pits, were sometimes slain to a man. Then at length the Spaniards perceived the utility of the southern colonies, after they had irrecoverably lost them. That so many thousand Indians who dwell in the southern parts, should be buried together in their darkness, is indeed a reflexion worthy of regret. Who will not deplore the infinite miseries of the Jesuits, who laboured for many years upon this people, the hardships of their journeys, their want of necessaries, the daily perils that threatened their lives, and the greatness of their labours,—labours almost fruitless, except indeed their sending to Heaven a considerable number of infants, baptized before their death, as also not a few adults? At first, before oxen and sheep were sent for their subsistence, the Fathers lived on

horse-flesh, the daily food of those Indians. Father Thomas Falconer, who wandered over all the plains with his Indians to kill horse-flesh, having no plate of pewter or wood, always, in place thereof, made use of his hat, which grew at length so greasy, that it was devoured whilst he slept by the wild dogs with which the plains are over-run. Father Matthias Strobl's hut being set on fire by some villain or other, and the straw roof being already in flames, he would doubtless himself have perished, had he not been awakened from his deep sleep, by one who continued faithful to him, and rescued him from the conflagration. The town of Concepcion was situated in 322° 20′ longitude, and in latitude 36° 20′; that of Nuestra Señora del Pilar was distant from Concepcion seventy leagues to the south west; from Buenos-Ayres full an hundred and ten leagues; from the town of Nuestra Señora de los Desamparados only four.

Nor must you think that the care of taming and instructing the southern nations has been neglected till our time. This business was taken up by the Catholic kings, and us Jesuits, in the last century. Every method was vainly tried to unite them to Christ and the Catholic King. Omitting the rest, Fathers Nicholas Mascardi and Joseph Quilelmo, indefatigable

teachers of the holy religion in that place, were murdered by their cruel, unmanageable disciples. Nothing daunted by the ferocity thus manifested in the savages, our companions, both of Chili and of Paraguay, left no stone unturned to enlighten these uttermost corners of South America with the torch of the gospel; but the attempt was ever vain and unrewarded, save by the immortal glory which their apostolic magnanimity and fortitude gained them. In the year 1745, a ship was despatched by Philip the Fifth from Cadiz to Paraguay, for the purpose of inspecting the shores of Magellan, and the neighbouring land. If any post or commodious station offered itself, it was to be fortified against an enemy. If they discovered the quarters of any savages, a colony and religious instruction were to be awarded them. Three Jesuits, therefore, were destined by the King for this perilous expedition. Father Joseph Quiroga, Father Joseph Cardiel, and Father Matthias Strobl. From the military guard of the city of Monte-Video, twenty-five soldiers were chosen for the defence of the ship and the crew. They weighed anchor in the port of Monte-Video, on the 17th of December, 1745, and set out with prosperous gales and minds full of hope.

Whatever land or water came within his observation, was diligently explored, and carefully

noted in the journal of the voyage by Father Quiroga, who, in a boat, examined the harbour, the rivers, the lakes, the depth or shallowness of the water, the sandbanks, and the rocks between them; in short, every thing dangerous or favourable to the navigation of the Spaniards. Fathers Strobl and Cardiel, meantime, taking a divided route, on foot, in various directions, attended by a certain number of soldiers, traversed the plains remote from the shore, and accurately examined their nature, and whether any sign of human habitation, or convenience for the same appeared, often ascending the steepest mountains with this view. Not unfrequently they receded many leagues from the shores, in the hope of finding Indians. Father Strobl, after having proceeded four leagues without seeing a man, or any sign of man's habitation, abandoned all hope, and sent a soldier to tell Father Cardiel, who had travelled many leagues, and was quite spent with so much walking, that he thought it highly imprudent to prosecute the journey they had begun—that they might not improbably fall in with a numerous troop of savage horse, by whom they, a few wearied footmen, would undoubtedly be all cut to pieces—that he had himself long wished to fall in the cause of religion, but that he neither could nor

would place the lives of others in such peril—and that even were they free from this danger, and were no enemy to meet them, yet, as their provisions were already consumed, if they prosecuted their journey, both themselves and their companions must perish of hunger. Father Cardiel however, always intrepid, dissuaded the return, urging that the habitations of the savages must be near, principally on this ground, that he saw a whitish dog barking at his men, but which soon after ran away, hastening, as might be believed, to his master. In spite of these arguments, both Fathers returned with their companions to the ship. There the matter being prudently discussed, and all the officers consulted, it was finally resolved that Father Cardiel, at his earnest desire, should be permitted to repeat the journey, on this condition, that he should set out with four and thirty men, soldiers as well as sailors, who were willing to follow him of their own accord, and with provisions sufficient to last them eight days. The journey was begun on the 20th of February, and each day they travelled about eight leagues. For the most part, they walked in a narrow and almost obliterated path of the Indians. Drinkable water was every where at hand. Except emus, and a few huanacos, no beasts were any where seen. On the fourth day of their jour-

ney, about evening, they perceived a high hill, from the top of which they beheld a plain, entirely destitute of grass and trees. They all thought the cold of the night air intolerable; for though shrubs were at hand to supply their fires, yet when the side nearest to it grew warm, the other, being exposed to the most piercing wind, seemed frozen. Amidst all this cold, the courage of the soldiers daily inflamed more and more, but their bodies were observed sensibly to fail and break down. Their shoes being worn by the roughness of the roads, many of them crept along with naked, and not a few with wounded feet. Father Cardiel too was first afflicted with nephritic pains, and afterwards with such a debility in his feet, that he could not advance a step without crutches. With all this, however, the ardent desire of discovering the habitations of the savages never cooled. But their provisions, which were destined for an eight days' journey, being now, after five days, in great measure consumed, they were obliged to hasten back again to the ship. One effect however was produced by this calamitous journey—it was now finally determined, by ocular demonstration, that the hordes of the savages were at a great distance from the sea; and that immense tracts of land bordering upon the shore were uninhabitable, as destitute either of

fresh water, grass, or trees, or of all together; so much so at least, that, except a few emus and huanacos, you could find scarce any sort of beast. All things, therefore, having been considered, since there was no opportunity of erecting a colony for the Indians, or a fortress for the Spaniards, they unanimously resolved upon a return; to be conducted, however, in such a way, that they should repeatedly disembark and explore those places they were obliged to pass by in coming. At length, on the 4th day of April, about sun-set, they cast anchor in the port of Buenos-Ayres. The journal which Quiroga had made of the shore and harbours, soon after printed and published at Madrid, with plates of whatever seemed remarkable, will be of the highest use to Spaniards hereafter in navigating this turbulent sea. I may here add, that Father Joseph Cardiel, not having discovered the savages of the coast of Magellan, either in his naval or his pedestrian journey, set out on horseback in search of them, with a few companions. But their pains were as fruitless as before. After wandering much and long over these solitary plains, and consuming all the provisions he had brought with him, he was reduced to such straights as to be obliged to feed on grass, unless he preferred dying of emptiness, the extremity of which obliged him to return to

Buenos-Ayres, his business left unfinished, but himself, for his signal fortitude, his magnanimity, and apostolic ardour, truly deserving of honour and imitation.

In the year 1765, a large merchant-ship freighted to the value of some millions, destined to Callao, a harbour of Lima, was stranded and lost off the island of Terra del Fuego. The crew fortunately escaped, and reached the island in a boat, the ship gradually foundering. Part of the provision, the cannon, and other necessaries for supporting life, were providently got out of the leaking vessel. A hill, neighbouring to the sea, was occupied by the shipwrecked Spaniards, and fortified by I don't know how many cannon. These being discharged, a troop of the Indian inhabitants was seen advancing from afar. They were entirely naked, and each kept rubbing his belly with his hands. On a second explosion, they all fell on the ground, still continuing, however, to rub their bellies. This ridiculous action of the savages the Spaniards were in doubt whether to construe into a sign of friendship, or of hostility. As no one understood their language, they were invited by gentle tones, friendly nods, and little gifts displayed to them, till at length they approached the station of the Spaniards, still rubbing their bellies without intermission.

Which custom surprizing the Spaniards, they now call them *Rascabarrigas,* or the belly-rubbers. To conciliate the minds of the islanders, elegant weapons, food, and various other little gifts were offered them; except, however, some strings of glass beads, nothing was accepted by the savages, who feared some fraud from the strangers. They were, however, peaceable and quiet, so that the Spaniards mixed amongst them, without fear of injury or hostile designs, and solicitous only respecting the means and opportunity of sailing back to their friends. It was resolved to build a vessel after their own model, sufficient for the number of the shipwrecked. Trees adapted for ship-building abounded in this island, nor did they want workmen or carpenters' tools. The Indians themselves faithfully indicated the places which supplied the hardest and largest wood, and with more good-will than usefulness assisted the Spaniards in cutting and sawing the beams; but after three or four strokes of the axe, or lifts of the saw, they retired fatigued, being utterly unaccustomed to labour. The Spaniards, however, longing to revisit their native soil, made up for the deficiencies of the Indians, by their own sedulity. And now when every thing was ready and prepared, iron nails were wanted to fasten the joints of the

ship. But the sea, bringing up various chests from the foundered ship with the tide, one was found amongst them full of the requisite nails, a circumstance looked upon by all as a signal favour of Providence. Some of the tackling, which they had prudently taken from the lost ship, proved of great service. With these aids the finishing stroke was put to the little vessel, in which, after a prosperous voyage of about a thousand leagues, they arrived safe at the harbour of Monte-Video. All this which I have written on the shipwreck and navigation of the Spaniards was related to me in the city of Santa Fé, by an old Biscayan, builder of the foundered ship, companion of all their perils, and architect of the vessel constructed in the island. In the year 1788, when with my companions I was awaiting my passage to Europe, at Buenos-Ayres, a ship set sail from that port, for Terra del Fuego, with two priests, who being liberally provided with every thing from the royal treasury, were ordered to establish a settlement in that island, and to teach the natives religion. But not long after, they returned to Buenos-Ayres in the same ship, without effecting their business. What was done, or attempted, and what was the occasion of their hasty return, I know not: but I heard the groans of the noble Spaniards, who

earnestly desired the Jesuits for this momentous expedition: they, however, were recalled, God knows why, that same year to Europe. In succeeding years the Spaniards have wished to subdue and instruct that island, which lies near to the Maloine islands, in south lat. 51° 30′, and west long. 60° 50′ from the meridian of Paris. This isle, named from St. Maló, a town of Bretany, was taken possession of with the labour and expense of Louis Antoine de Bourgainville, then colonel of foot, and of Messieurs de Nerville and de Arboulin, his relatives, and in the year 1763, or more probably 1764, delivered to some loyal and industrious families of Nova Scòtia, to be civilized. Three years after, to wit in 1767, it was sold for eighty thousand Spanish crowns to the Catholic King Charles, who thought that this colony of strangers, as neighbouring to the provinces of Peru and Chili, so rich in gold and silver, might prove dangerous to his monarchy, in case of war, and cause a disunion between the Spanish and French monarchies. The French families being transported to Europe, their places were supplied, for the most part, by Spanish convicts, scarce one of whom did not prefer a prison, or speedy death, to the constant and lasting calamities of this province. Philip Ruiz Puente, of the king's war ship *La Liebre*, who brought out

new settlers, warlike implements, and provisions, was appointed to the government. He was accompanied by another ship of war, *La Esmeralda*, commanded by Matteo Callao.—This captain, returning in the same, from the Maloine islands, to Monte-Video, transported me, with one hundred and fifty of my associates, back to Europe. We had with us the Frenchman Nerville, who had just discharged the government of that unhappy island; from him, as well as from the Spaniards employed there, I learnt most of what I have written on this subject.

On sufficient grounds have I bestowed the epithet unhappy on an island, which is, nevertheless, by some Frenchmen pronounced equal to the Fortunate Islands: and no wonder, for do we not always cry up the goods we want to sell? Attend to what I have learnt on good authority, respecting the island of St. Maló. It was never habitable either by Indians, or beasts, so destitute is it of every thing pertaining to the support of life. Rushes instead of trees, moss instead of grass, marsh and mud for earth, cold always the most severe for air, and night almost perpetual, with darkness and clouds, instead of sun, are what it offers to the new inhabitants, The longest day lasts but a very few hours. From its propinquity to the antarctic pole, it generally rages with furious

south winds, whirlwinds, and tempests. The frost, joined to almost perpetual snow, is on this account the more intolerable, because throughout the whole island, which is far from extensive, there is not wood sufficient to make a fire, or build a hut, unless it be brought from Terra del Fuego, which cannot be done without danger. The goats which the French had brought, either from the want of pasture, or the noxious qualities thereof, soon perished. The corn, from the ooziness of the soil, never attained maturity, the stalk being always stunted, and the ear seldom formed at all. Hence, the European supplies being now consumed, frequent famine was added to their other miseries. Provision was afforded them by the water-fowl called by the English, Penguins. In place of bread, powder and shot were given to the Spanish soldiers and others to shoot birds with. These, though at the coming of the French exceedingly numerous, yet partly from being constantly shot, partly from being scared away, were so diminished, that the succeeding Spaniards were deprived of this solitary benefit of that most sterile island. Nevertheless, it must be confessed, that this island, though calamitous to its inhabitants, is of service to the Spaniards, as affording a refuge to vessels in distress, an harbour capable of containing a moderate fleet, and con-

venience for procuring water. The places open to the attack and ascent of an enemy, were fortified by a mound and a tier of cannon. Antonio Catani, then colonel of foot, commanded the small garrison. But in discoursing on the devastated cities of Paraguay, I have suffered myself to be carried away into the lands of Magellan. Let me now return to the straight road.

To record every Indian town which has been overturned in Paraguay, and the causes and periods of the fall of each, were a task of infinite time and labour. It appears on record that upwards of four hundred towns, which formerly stood around Guadalcazar, a city of Tucuman now destroyed, utterly perished. Within the limits of the cities Cordoba, Rioja, St. Iago, St. Miguel of Tucuman, Corrientes, and Asumpcion, I might almost say that innumerable colonies have fallen to the ground. Those which remain are mere shadows of towns, consisting of a few miserable inhabitants—miserable, for they are slaves to Spanish individuals. Before I relate the devastation of many of our Guarany towns by the Mamalukes, inhabitants of Brazil, allow me to make a few premises. The soldiers, fresh arriving from Spain, subdued the lands and nations bordering on the Parana and Paraguay only: as for those more remote, they did not want courage to explore them, but means. Not

a few of the Guaranies were enlightened by the torch of the Gospel, chiefly by the Franciscan Fathers, and, if circumstances permitted, placed in colonies. St. Francisco Solano and Lewis Bolaños were famous for their apostolic expeditions in that age; but the want of associates like themselves, and of successors, rendered them unequal to the harvest which lay before them; and infinite was the number of Guaranies which lurked within the coverts of the woods and shores—a multitude hostile, on every opportunity, to the Spaniards, then few in number. In 1610, Ferdinand Arias, the governor both of Buenos-Ayres and Asumpcion, marched out with numerous forces against the Guaranies inhabiting the banks of the Uruguay, but alarmed by their numbers and ferocity, returned to the city. Not by the fire-vomiting arms of soldiers, but by the sweet eloquence of the Fathers, by love, not by fear, were the Guaranies vanquished. In the same year, Father Marcello Lorenzana, a Spaniard, and master of our college at Asumpcion, at length prevailed upon the Guaranies who wandered between the Paraguay and Parana, to embrace the Roman Catholic religion, in the large town which he had built for them, under the illustrious name of St. Ignatius Loyola. Near about the same time, Fathers Giuseppe Cataldino and Simone Maz-

zeta, Italians, Antonio Ruiz de Montoya, an American Spaniard, and their successors, in after years, Roque Gonzalez, a Spaniard of Paraguay, Pedro Romero, Diego Boroa, &c. all Jesuits, explored the province of Guayra, as also those forest and mountain coverts toward the river Uruguay, which had proved inaccessible to the Spanish soldiery, where they discovered many thousands of Guaranies, who were assembled in colonies, and brought over to God and the Catholic King.

These rapid progresses in the Christian cause have been miserably retarded by the Mamalukes from Brazil, a bordering country, and principally from St. Paulo. The Mamalukes are a set of people born of Portugueze, Dutch, French, Italians and Germans, and Brazilian women, celebrated for skill in shooting and robbing, ready for any daring enterprize, and thence distinguished by the foreign name of Mamalukes: for it was their constant custom to carry off the Indians, led by the Fathers into the freedom of the children of God, into the hardest slavery. By their incursions, repeated for a number of years, they overthrew the towns of Asumpcion in Ỹeyuỹ, of Todos Santos in Caarõ, of the holy Apostles in Caazapaguazù, of St. Christopher on the opposite side of the Ỹgaỹ, of St. Joachim in the same place, of Santa

Barbara, on the western bank of the Paraguay, and of St. Carlos in Caapi. The Guarany inhabitants of these colonies, with the exception of a few who escaped by flight, were led away to Brazil, chained and corded, in herds, like cattle, and there condemned to perpetual labour in the working of sugar, mandioc, cotton, mines, and tobacco. The sucking babes were torn from the bosoms of their mothers, and cruelly dashed upon the ground by the way. All whom disease or age had rendered imbecile were either cut down or shot, as being unequal to the daily march. Others, in sound health, were often thrown by night into trenches prepared for them, lest they should take advantage of the darkness, and flee. Many perished by the way, either from hunger or the hardships of a journey protracted for many leagues. In this hunting of the Indians, they sometimes employed open violence, sometimes craft, equally inhuman in both. They generally rushed into the town in a long file, when the people were assembled in the church at divine service, and, blocking up every street and corner, left the wretched inhabitants no way of escape. They frequently disguised themselves as Jesuits, wearing rosaries, crosses and a black gown, and collected companies of Indians in the woods. Many towns that were liable to the treacherous hostilities of the

Mamalukes, such as Loretto, St. Ignatius, &c. were removed to safer places, by a journey of many months, and with incredible labour, both of the Fathers and of the Indians. Nor did the Mamalukes spare our colonies of the Chiquitos and Moxos, nor others in the lands of the Spaniards, which were administered both by the secular and regular clergy. The Indian towns settled on the banks of the Yeyuỹ, in Curuquati, and many others, were entirely destroyed by the Mamalukes. The same fate attended Xerez, Guayra, (Ciudad real,) Villarica, &c. cities of the Spaniards. Who can describe all the devastation committed in Paraguay? Hear what is said on this subject in the collection of *Lettres Curieuses et Edifiantes*:—"It is asserted," say they, "that in the space of one hundred and thirty years, two millions of Indians were slain, or carried into captivity by the Mamalukes of Brazil; and that more than one thousand leagues of country, as far as the river Amazon, was stripped of inhabitants. It appears from authentic letters, (sent by the Catholic King —— in the year 1639, 16th Sept.) that in five years three hundred thousand Paraguayrian Indians were carried away into Brazil." Pedro de Avila, Governour of Buenos-Ayres, declared that Indians were openly sold, in his sight, by the inhabitants of the town of St. Paulo, at Rio

Janeiro; and that six hundred thousand Indians were sold, in this town alone, from the year 1628 to the year 1630.

But this their rapacity did not always remain unpunished; for, after the Guaranies were permitted by the King to carry fire-arms, they were frequently repulsed, and chastised with bloody slaughters. Memorable above the rest, was that victory which four thousand Guarany neophytes obtained at the river Mborore over a numerous flotilla of Brazilian banditti. Four hundred of the inhabitants of St. Paulo were present, in three hundred barks, with two thousand seven hundred of their allies the Tupies, the most ferocious savages in Brazil. The Guaranies, headed by Ignacio Abiazù, a chief of their nation, went to meet the enemy in five ships, and firing the cannon upon them, overturned three of their boats, many of the Brazilians being either killed or wounded. Most of them, terrified at this unexpected salutation, leaped from their boats on to the shore, and despairing of success in a naval fight, assaulted the army of Guaranies in the rear by surprize; but were bravely repulsed on every side, and partly slain: and indeed they would all have been massacred, had not night put an end to the fight and the victory. Next day they pursued the remnant of the enemy through the wood with such

success, that the very few who remained alive, forsaking their camps and their boats, hastened home in great trepidation, and covered with wounds. Three only of the victorious Guaranies were slain about the beginning of the conflict, and forty wounded. This event rendered the men of St. Paulo afraid of the emboldened Guaranies. Peace and security were restored to their towns, and Christianity, which the perpetual incursions of the Mamalukes had not only disturbed, but almost banished, was every where greatly forwarded.

Nor should you imagine, that these things, relating to the Brazilians, are calumniously represented or exaggerated by Spanish writers. The Most Faithful King Joseph I. himself confesses, in a decree issued on the 6th of July, in the year 1755, and inserted into the new code of Portugueze laws, that many millions of Indians were destroyed, and that, at the present time, very few Brazilian towns remain, and equally few inhabitants. He adds, that this was occasioned by the depriving the Indians of their liberty, contrary to the laws of Portugal. He declares the Indians free, orders the captives to be set at liberty, &c. Likewise other pious kings of Spain and Portugal, his predecessors, prohibited all robbery, sale, oppression, and persecution of the Indians whatsoever, under the

severest penalties, by repeated laws. Many governours of provinces urged, but rarely brought about the observance of these decrees. For innumerable persons, who profit by the captivity and services of the Indians, care more about riches than about conscience and honour. The barbarity of these men towards the Indians was pourtrayed in lively and faithful colours by the Jesuit Father Antonio Vieyra, who preached on this subject at the Court of Lisbon, in the year 1662, when his persecutors had turned him out of the province of Maranham, on account of his defending the liberty of the Indians.

As the royal laws were disregarded in Brazil, in order to eradicate this abominable custom of enslaving and ill-treating the Indians, the King found it necessary to have recourse to the threats and penalties of the Pope. Paul III., Urban VIII. and Benedict XIV. threatened to excommunicate all who should presume, in the words of the Roman Court, to reduce the Indians to a state of servitude; to sell, buy, exchange, or give them away; to separate them from their wives and children, or in any way whatsoever to deprive them of their liberty, or retain them in servitude; or to do the aforesaid under any pretext whatsoever of lending them counsel, aid, favour, or service; or to declare, or teach it to be lawful so to do, or to effect it in any way whatsoever.

All this was prohibited, under pain of excommunication, in favour of all the Indians then dwelling in the provinces of Brazil and Paraguay, and at the river Plata, as well as in all other regions both of the western and southern Indies. The Pontifical and Royal letters against the oppression of the Indians were intended also to correct and intimidate the Spaniards, who, though they had formerly been less eager in captivating the Indians, were accustomed nevertheless to make use of them as slaves, in opposition to the commands of the king. It is incredible how wickedly they strove to disturb the colonies of the Chiquitos and other savages, because they feared that no Indians would be left in the woods for them to take and sell. For from this traffic of the Indians many thousands of crowns were yearly collected; but on account of it the savages were forcibly deterred from embracing religion, perceiving that, if they became Christians, and the friends of the Spaniards, they must be eternally enslaved and miserable.

The Spanish historians complain that the Indians were hardly treated and oppressed with labour by their masters, in many cities of Paraguay. The Indians, wearied with miseries, returned, whenever they could, to the ancient recesses of their forests. The Lules, who had formerly been baptized by St. Francisco So-

lano, and cruelly enslaved by the inhabitants of the city Esteco, fled to the woods which they had formerly inhabited; from whence the Jesuit Father Antonio Machoni, a Sardinian, brought them back, and with incredible labour civilized them in Valle Buena, and they have remained to this day in the town of St. Estevan. The warlike Calchaquis, deserting their Spanish masters, and scorning miserable servitude, returned to the caves of their native land, whence sallying forth, they afflicted Tucuman with frequent and bloody slaughters. The citizens of Concepcion, on the banks of the river Bermejo, were all destroyed by the Indians whom intolerable slavery had exasperated. The Jesuits, whilst, intent upon disseminating religion, they endeavoured to vindicate the liberty of the Indians, were often punished with exile, often with calumny and abuse, by those who had their own private interest more at heart than the augmentation of religion, or of the royal authority. The Indian towns, the inhabitants of which were subjected to private individuals, named Encomenderos, have long since been reduced, as I said, to such wretchedness, that they rather seemed shadows of towns, than the reality: whilst, on the other hand, the thirty-two towns of the Guaranies, ten of the Chiquitos, and smaller ones of other nations, the inhabitants of which were subject

only to the Catholic Monarch, continually increased in population, and always remained and flourished under our discipline. I do not pretend to say that Paraguay and Brazil were at all times utterly destitute of Portugueze and Spaniards who paid strict obedience to the laws, who execrated the avarice and cruelty of their countrymen in regard to the Indians, and left no stone unturned to restore and protect their liberty, and to aid the progress of religion. But alas! those few with grief beheld themselves unable to correct a multitude of barbarians. Ability, not inclination was wanting.

Some mention has been made of the rivers which flow through Chaco: yet much remains to be said of the Parana, the chief and receptacle of them all, which at Buenos-Ayres obtains the splendid but inappropriate title of La Plata. Historians have made many mistakes respecting the source of this river, and the origin of its name. For they think that La Plata takes its rise chiefly from the Paraguay, and that this latter comes from the lake Xarayes. But in both these conjectures they are wide of the mark. For the river La Plata is in reality the vast Parana, enriched in its course by the Paraguay, Uruguay, and innumerable other streams. From its distant source, as far as the Pacific Ocean, it is invariably distinguished by the

Guarany natives with the name of Parana, which word signifies something akin to, or resembling the sea.

In the year 1509, Juan Diaz de Solis, sailing from Europe, discovered the river Parana, and gave it his own name, Solis. In the year 1527, Sebastian Cabot and Diego Garcia called it the Silver River, Rio de la Plata, because they found among the Indians dwelling near it some plates of silver, brought from Peru by the Portugueze, and robbed from them, but suspected by the Spaniards to have been taken out of the bosom or shores of this river. But after nearly three centuries had elapsed, no silver had yet been discovered there. This river, which, though destitute of silver, is perhaps the greatest in the world, retains to this day the name of the Parana, which it received at its rise. It first bears the name of La Plata at the river Las Conchas, six leagues distant from Buenos-Ayres, where appears a remarkable rock, La Punta Gorda, a little beyond which place, on the western shore, it absorbs the Uruguay, which has already received the waters of the Rio Negro. By which means, the Parana is augmented to such a degree, that at Las Conchas it is ten leagues in width. Hence vessels that have sailed through the Paraguay and Parana rest here as in port, and are here unloaded, and

loaded afresh before their return. For those small vessels which are sent from the cities of Asumpcion and Corrientes and from the Guarany towns, could not safely proceed farther.

The source of the river Parana has afforded as much matter of controversy as the native city of Homer. The Spaniards who first went to subdue Paraguay, after travelling for the space of full five hundred leagues, either on the stream itself, or on its banks, are said never to have been able to arrive at its source. The Brazilian Indians think the Parana originates in an immense lake arising from the Peruvian mountains, perhaps that called Lauricocha, near the Guanuco, about the 11th degree of latitude. Others, with more appearance of probability, derive the river Amazon from the lake above-mentioned, though the Indians insist upon it that the Amazon and the Parana both proceed from the same source. But who would pay any attention to what the Indians say? Many rivers flowing from the Peruvian mountains vary their course every now and then, and are mingled one with another: now who, amid such a labyrinth of streams, could so exactly distinguish the Parana from the rest as to leave no room for doubt? It has been ascertained that this river, in its various turnings and windings, travels more than eight hundred leagues before it disgorges itself

into the sea, by a huge mouth. In this long journey it receives the waters of many rivers and innumerable brooks. Who can enumerate this crowd of confluent streams? I will mention the principal ones which occur to my memory, following its course from lands situate between north and south.

On the western shore the Parana receives the waters of the Ÿgayrÿ, the Ÿmuncina, the Monicÿ, the Amambaÿ, the Ygatimÿ, navigable to middle-sized vessels, the Ÿgureÿ, the Yguairÿ, the Acaraÿ, a noble river, as large as, perhaps larger than the Danube at Vienna. For on the shore itself I measured it to be full six fathoms deep, and that not during the time of inundation. It flows in a very wide channel, but so quietly that you can hardly hear it. It is joined on the way by thirty rivers of various sizes, and would certainly be navigable to large ships, were it not impeded by rocks, which might perhaps be removed could the Spaniards be brought to perceive the advantages of its navigation. For the herb of Paraguay, which abounds in the woods near its banks, might be transported along this river to the Parana, and thence to the city of Buenos-Ayres, with a great saving both of time and expense. But they are blind to these advantages. The Mondaÿ, which springs from the Tarumensian woods, near the

town of St. Joachim; and afterwards other moderate-sized rivers, such as the Ŷhu, the Tarumaỹ, the Yuguirỹ, the Guirahemguaỹ, the Cambay, &c. augment it to such a degree that it becomes navigable to larger kinds of skiffs and boats—the Caapivarỹ, the Aguapeỹ, which has a narrow but very deep channel, and is dangerous to swimmers by reason of its water monsters, (the Yaguaro, a kind of water tiger, often devours horses and mules as they are swimming in this river)—the Atingỹ. All these, which I have mentioned, are of lesser note; they are quite ignoble streams. But now listen attentively whilst I give you some description of the place where the city Corrientes is situated and which lies in lat. 27° 43′ and in long. 318° 57′. You must know that the great Paraguay, swelled by the waters of so many rivers which it has received in its progress, here becomes the prey of the greater Parana, and, at the same time, loses the name it has hitherto borne. For that vast body of water formed by the junction of both rivers is never called the Paraguay but always the Parana, because the former brings a far greater quantity of water than the latter. But though both rivers flow within the same banks and in the same channel, the limpid Parana, scorning the muddy waters of the Paraguay, for some time refuses to mix entirely

with it. It is certain that, about three miles apart, you may perceive the waters to be different both in colour and taste. The Parana, which, a little before, flowed westerly, following the Paraguay, changes its course, hastening towards the sea, the mother of streams. However you may despise this conjecture, it seems to me to possess some probability. In the country of St. Iago del Estero, the rivers Dulce and Salado have frequently changed their channel on this very account, and the same has been the case with regard to some other rivers. In the city of St. Iago, St. Francisco Solano built a dwelling-house, and a handsome church, for his companions, in such a manner that the door of it did not look toward the market-place of the city, but towards the plain. The brothers not approving of this plan, the architect Solano, who was famous for the gift of prophecy, bade them wait a little, saying, that what they now desired, in ignorance of the future, would some day really happen. Some years after, the river Dulce, which washes the city, changed its channel. The city was forced to be changed also, which being done, the door of the church fronted the market-place, as it does at this day. The event verified the prediction, which the native Spaniards related to me when I was there. But let us now return to the Parana.

The eastern shore of it is, in great measure, steep and stony; the western shore, on the contrary, is low, muddy, and subject to floods. All that part of this province which looks towards the west, beyond the Parana, abounds in immense trees of various kinds, (fit for building ships and waggons,) in fertile pastures and tracts of land, now sinking into plains, now rising into gentle hills; yet you can scarce ever meet with a situation fit for human habitations or fixed towns, either from the superfluity or deficiency of water, or, which comes to the same thing, the saltness and bitterness of it; for if you build a colony on the shores of the Parana, it will be inundated with water on the next flood, extending for two leagues beyond: if you remove it two or three leagues from the shore, both the inhabitants and the beasts will perish of thirst.

The rivers of lesser note, and more uncertain duration, which unite with the Parana, after its junction with the Paraguay, are the rivers Negro, Verde, Blanco, Rubeo, the Rio de Gomez, the Atopehenra-lauatè, or the place of Capibaris, the Alcaray, the Cayman, the Embalzado, the Rio del Rey, called by the Abipones Ychimaye, the Malabrigo, called by the Abipones Neboquelatèl, the Eleya, the Saladillo, the Inespin, called by the Abipones, Narahaguem, the Rio de Martin, the Salado, the Carcaranal, the

Tortugas, or river of tortoises, the Matanza, the Rio de los Arrecifes, the Areco, the Lujan, the Rio de las Conchas. We have now reached the port where vessels, coming from the east or west of Paraguay, are in danger; for here the Parana, swelled by the accession of so many rivers, and by that of the vast Uruguay, and the equally vast Rio Negro, takes the appearance of a sea. But just as the Parana does really show itself akin to the sea, it suddenly receives the name of La Plata. What is the reason of this? Has it any silver in its bosom or on its shores? Nothing is to be found there but mud. However, as Scipio received the title of Africanus, from having devastated Africa, by the same right may the Parana be called La Plata from the Peruvian silver which it has often swallowed up, along with the ships that contained it. Here the river is ten leagues wide, yet, not content with its own magnitude, it joins with itself the other ignobler streams which flow towards the west. The most noted of them is that by the Spaniards called Riachuelo.

The more considerable rivers which join the Parana, on the eastern side, beginning at the north, are the Añembỹ, the Parana-panè, the Guitaỹ, the Iguazu, flowing from Brazil, by which the Mamalukes formerly came to plunder the Guaranies. This river is of no inconsiderable

size, and will bear tolerably large vessels. Four leagues from the bank of the Parana you meet with a cataract thirty ells high, from which the river falls headlong, with a frightful noise, and such a foam proceeds from it that the thick vapour, covering the place like a cloud, may be seen at four leagues distance. As this cataract is utterly impassable, navigators travel by land, for some time, and drag their boats along with their hands. Three leagues from the cataract the river is only one league in width. The Ybiraytỹ, the Yabebirỹ, which flows past the Guarany towns of St. Ignatius-miri, and Nuestra Senhora de Loretto, is narrow but very deep, the St. Ambrose, the Rio de los Astores and the Rio de Sta. Lucia. Through these last-mentioned rivers we have often known those cruel pirates the Payaguas come to plunder the estates of the Spaniards, and slay the inhabitants. The Corrientes, a moderate-sized river, which rises from the neighbouring lake Yberà, formerly called Lago de los Caracaras, said to be about four miles in length, but of inconsiderable and varying breadth. Many islands which it contains, are chosen at this time by Indian runaways, as places of concealment; and we learn that, in the last century, they were inhabited by the Caracara Indians who proved very formidable, and almost invincible, to the Spaniards.

However, at the command of the Governour of Buenos-Ayres, a party of our Guaranies, under Juan de Garay, happily attacked and conquered them, most of the enemies being either slain or taken captive after an obstinate defence of all the islands. These are the names of the other rivers which join the Parana. The Guanguilarò, the Espinosa, the Alcaràz, the Hernand Arias, the Pardia, the Rio de los Charruas and the Pacu. But all those streams are of lesser importance. *Jam paulò majora canamus.*

We have now arrived at the place where the Uruguay, a river of the first magnitude, submits to the Parana. It rises in the mountains of Brazil, between the twenty-fifth and twenty-sixth degrees of latitude, in the Captaincy of St. Vicente, (according to Bourgainville,) and flows for the space of full two hundred leagues; the rocks and cataracts with which it is here and there impeded render navigation extremely difficult, even to middle-sized skiffs. The largest of all the cataracts blocks up the whole river at the Guarany town Yapeyù, and denies a passage to skiffs coming from the port of Buenos-Ayres, so that the sailors are obliged to carry them on their shoulders by land, in order that they may proceed on their journey. It is proper in this place to describe that kind of vessel in use amongst the Uruguayan Indians,

and which in the Spanish language is called *balsa*. Two very large boats, sometimes seventy feet long, are firmly joined together with cross-planks, and over them they strew reeds carefully matted by way of a pavement. In the midst a little reed hut is erected, covered with bulls' hides, to defend it from the inclemencies of the weather. Oars, not sails, are made use of, both in going up and down the stream, with more security than despatch. There is, moreover, need of many rowers; in all directions you meet with islands rich in palms, citrons, peaches and various other trees, but which abound likewise in tigers, serpents and other wild animals either dangerous, or fit for food. The immense rocks, of which these cataracts are composed, being blasted, were indeed hurled aloft into the air, but falling back again into the river, obstructed the passage of even the smallest vessels. Thus remedies are often worse than the disease itself.

The most considerable rivers which flow into the Uruguay on the western shore are the Yapucà, the Piguirỹ, or Pepirỹ, the Guanumbacà, the Acaranà, the Mborore, much celebrated for the victory I related to you gained by the Guaranies over the Mamalukes, the Aguapeỹ, the Miriñaỹ, flowing from the lake Ŷbera, the Vaccaretâ, the Timboỹ, the Gualeguaỹ, the Rio de

los Topes, the Yaguarỹ-guazù. All these rivers are joined in their course by lesser streams. The Uruguay receives, on the east, the waters of the Uruguaỹ-miri, the Uruguaỹ-pîtà, or the little, and red Uruguay, the Ỹribobà, the Rio St. Juan, the Ñucorà, the Yaguarapè, the Yyuỹ, the Piritinỹ, the Ỹcabagua, the Mbutuy, the Toropỹ, after its junction with the Ybicuỹ, the Guaraỹ, the Tebiguarỹ, the Lechiguana, the Rio San Salvador. In this neighbourhood, the Rio Negro, famed for the excellence and abundance of its waters, enters the Uruguay a little before that river unites with the Parana, at La Punta Gorda. From such a number of uniting streams you may arrive at an idea of the magnitude of the Uruguay.

I must now discourse upon the Paraguay, from which the Parana receives its chief augmentation. The origin of this river has occasioned as great a dispute as that of the Parana It is, however, now established beyond all doubt, that those persons who have written that this river comes out of the lake Xarayes are quite mistaken. This ancient and universal error, with good leave of Bourgainville be it spoken, did not originate in the Jesuit geographers, but was brought into Europe by the Spaniards who first subdued Paraguay, and has in the present age been detected: for it is

certain that the Spaniards their successors have sailed on the river Paraguay sixty leagues beyond that lake, which proves that we must seek for the source of it in the more distant mountains situated towards the north-east. Some have thought that it proceeds from the fabulous lake Del Dorado. Bourgainville asserts that the Paraguay takes its rise between the fifteenth and sixteenth degrees of north latitude, at almost an equal distance from the North and South Seas. This opinion of the Frenchman I willingly leave to be examined by the later Portugueze who have dwelt there. However this may be, it has been clearly ascertained that the Paraguay does not take its rise from the lake Xarayes, as such a lake exists no where but in geographical charts; for that collection of waters which is sometimes seen is not the parent of the river Paraguay, but the offspring of it. This I boldly affirm on the authority of Father Joseph Sanchez Labrador, a curious naturalist, who repeatedly traversed both banks of the Paraguay, and by them arrived at the towns of the Chiquitos. The Chiquito town dedicated to St. Xavier is situated more towards the north than the rest, lying, as the same Sanchez observed, in the 16th degree of latitude, and the 313th degree of longitude. The town of Corazon de Jesus, situated in the

16th degree of latitude, and the 319th degree of longitude, lies nearest the shores of the river Paraguay, one hundred and ninety leagues distant from the city of Asumpcion. Now let geographers hear what the oft commended Sanchez declares to be his opinion respecting that imaginary lake Xarayes, and the fabulous island De los Orejones.

"The Paraguay," says he, "collected into one channel, for some time flows to the north, but presently separates into three branches, one of which the Indians call Paraguay-miri, that is little Paraguay, and the other two Paraguay-guazù, or great Paraguay. These three branches of the river are swelled by the usual floods, and, overflowing their banks, inundate the plain country for the space of two hundred leagues. European strangers have mistaken this frequent inundation, this collection of waters, which generally lasts for some time, for a permanent lake. In the midst of this imaginary lake they placed an island called De los Orejones, to which they give thirty leagues of length and ten of breadth, such being the degree of space occupied by the Parana when it overflows. This was called the Island of Paradise by the Spaniards who first conquered Paraguay, for there they rested for a short time after their mighty labours. Neither the Portugueze, who inhabit Cuyaba and Matto

Grosso, neighbouring places, nor the more recent Spaniards, nor the native Indians, were acquainted with any such lake." These are the arguments made use of by Sanchez, who was better acquainted with the controverted territories than any other person, and consequently, in my opinion, most worthy of credit, to prove the non-existence of the lake Xarayes and its island. Europeans travelling in unknown America are frequently deceived; they mistake an assemblage of waters caused by many months' rain for a river, or a constant lake, whereas it only proceeds from an immense flood created by continual showers, or by the melting of the snow on the Peruvian mountains.

The principal rivers, with the waters of which the Paraguay is enriched, join it on the western shore: the Jaurù, which flows into the Paraguay in 16° 29′ of south latitude, and 320° 10′ of longitude from the island of Ferro; the Mandiÿ beneath the site of the feigned lake Xarayes; the Rio Verde; the Yabebirÿ; the Pilcomayo, which falls into the Paraguay in two branches some leagues apart; the Timbò, a very large river, formed of two other lesser streams in the place called La Herradura, and diametrically opposite to the river Tebiguary, which is at the other bank of the Paraguay. Here I founded the Abiponian colony of San Carlos. The Rio

Grande, or Vermejo, enters the Paraguay before its junction with the Parana. On the eastern shore, beginning at the north, the Paraguay is joined by the river De los Porrudos, which had before received the waters of the Cuyaba, the name of a Portugueze town, and to which also the rivers Cuchipò-guazù, Cuchipò-miri, and Manso had previously united themselves. Lower down the river Taguarỹ, augmented by the waters of the Camapuâ, enters the Paraguay by three mouths, which are formed by intervening lands. Through these and other rivers the Portugueze sail in boats to their colonies Cuyabà, and Matto Grosso, where they gather little bits of gold out of the sand, with no inconsiderable profit. In Camapuâ, an intermediate place, Andreas Alvarez, a Portugueze, took up his residence with a number of negro slaves, and supplied the Portugueze, who travelled backwards and forwards, with provisions, waggons, and other necessaries from the produce of his land. The following are the names of the rest of the rivers: the Mboteteỹ, in the land of the Guarany Ytatinguas, for whom the Jesuits formerly founded two colonies in this place; the Ygarỹpe, the Mboymboỹ, the Tareytỹ, the Guaycuruỹ, on the banks of which the Guaycurus settled, and where they remain to this day; the Corrientes, the

Mbaerỹ, the Ỹpane-guazù, formerly the Guarambarè, the Yeyuỹ, navigable to large boats, impeded by many rocks, and augmented by many rivers, the most important of which is the Caapivary, which mingles its waters with the Yeyuỹ, about twenty leagues before that river enters the Paraguay. The shores of the Yeyuỹ, and of the Caapivary, are surrounded by immense woods, nurseries of the herb of Paraguay, a vast quantity of which is carried from the town Curuguati to the city of Asumpcion, by the other Spanish inhabitants. But let us proceed. The Paraguay receives into itself the following streams: the Tobatỹ, the Caañabê, and the Tebiguarỹ, navigable to middle-sized vessels. By the accession of so many, and such considerable tributary streams, the Paraguay is increased to such a size, that the old Spaniards used to sail through it to the city of Asumpcion, and even more distant places, in the same ships which had borne them on the Ocean, from the port of Cadiz. At this time no one dares attempt that, for fear of being wrecked, for this river swells to such a breadth, that you often cannot see either bank, as on the sea. It is intersected by many islands, and abounds in rocks, shallows, and quicksands. It is dangerous to sail on it without a pilot, called Pratico, well acquainted

with the river, who must be hired to go before the ship in a boat, and sound the depth every now and then. At night you must rest in a safe situation, and anxiously seek port on an approaching storm. But alas! spite of every art that can be exerted, vessels often stick in shoals, and quicksands, out of which they must be taken on the shoulders of the sailors, or, with the assistance of a skiff, in great part unloaded. For many persons, through greediness of gain, load their vessels with so much merchandise, that you can scarce see two palms of wood above the water, in consequence of which, if the wind blows violently, they are swallowed up in the waves. This river is likewise rendered dangerous by two whirlpools—places where, even when there is no wind, the water twists into circles, and forms, in the centre, a whirlpool, which sucks up whatever comes near it; but it may be passed without danger, unless the sailors are extremely stupid. There is more danger in various other places, where the river hurries along like lightning, and dashes vessels upon rocks or shallows. In sailing against the stream, oars alone will not suffice; sails must be made use of likewise. From these things you may judge that the navigation of this river can never be effected without danger, and reasonable alarm.

I must now speak of the cataract of this river, which is called by the Spaniards El Salto Grande, and occurs about the 24th deg. of lat. and 325th of long., near the ruined city of Guayrà. I myself never saw it: I shall, therefore, describe this prodigy of nature in the words of Father Diego Rançonier, a Fleming, who gave a most accurate description of it in the name of the Jesuit Father Nicolas Duran, then Provincial of Paraguay, in his annals of Paraguay, dated Rome, in the year 1626. "Amongst all the things," says he, "capable of exciting admiration in these provinces, this cataract easily obtains the first place; and indeed I know not whether the whole terraqueous globe contains any thing more wonderful. The river precipitates itself, with the utmost violence, down an immensely high rock, twelve leagues in descent, and dashes, in its downward course, against huge rocks of horrible form, from which the waters, being reverberated, leap up to a great height, and as the channel is in many places intersected, on account of the exceeding roughness of the rocks, the waters are separated into various paths, and then meet together again, causing stupendous whirlpools. In other places also, the waters, leaping down, rush into the rocks themselves, and are concealed from the view: then, after having remained hidden for

some time, again break forth, as if they had sprung from various fountains, and swallow up vast masses of rocks. Lastly, so great is the violence of the waters in the descent of the stream, that, during the whole course of twelve leagues, they are covered by a perpetual foam, which, reflecting the rays of the sun, dazzles the eyes of beholders with its brightness. Also the sound of the water, falling down and dashing against the rocks, may easily be heard at four leagues distance. This rough descent being ended, the water seems inclined to rest on the bottom, in smoother ground. For it often stagnates there by day, but almost every hour a loud noise arises, from some hidden cause, and the water leaps up to the height of many cubits. Fish of immense size are seen there: and Father Antonio Ruiz de Montoya, then missionary of the Guarany nation, in Guayra, declares that he saw a fish, as big as an ox, swimming on the river, with only half his body above water. Nor is this incredible; for when I visited the Guarany Reductions," (he means the new colonies of Indians,) "they wrote me word that an Indian had been swallowed by a river-fish of this kind, and afterwards ejected whole on to the bank."

Between the Guarany town De la Candelaria, and the city Corrientes, the Parana throws in

the way of navigators another smaller rapid, full of projecting rocks. I have no doubt that in the long course of the Parana, there lurks many a hidden whirlpool; the credibility of which opinion I will endeavour to prove to you, by relating a recent event. In the year 1756, whilst I was residing in the town of Loretto, a number of Guaranies began to sail in boats up the river Parana, to gather the herb of Paraguay in distant woods. When they had got a very few leagues beyond the town of Cuerpo de Cristo, all perished, except one man, the announcer of this unfortunate catastrophe. "About noon," said he, "they briskly rowed the boat to the sound of pipes and drums. The sky was serene, the air tranquil, the river placid, when suddenly the prow of the ship was lifted straight upright, like a pillar, and the poop proportionably lowered; but it fell back into its former situation, and put an end to the sudden terror excited, but not to the danger. For soon after the prow was again elevated by some hidden impulse, and the ship and all the sailors were swallowed up in a moment." One alone escaped, as I told you, by swimming, and announced the sad fate of his companions. We know the fact, but are ignorant of the cause. Almost every body agreed with me in attributing it to a hidden whirlpool, which had re-

mained till then undiscovered in this frequented river. Often in vast rivers, and still oftener in the wide ocean, places destructive to ships are discovered, which had, for many ages, escaped the observation of skilful navigators.

The Parana abounds in innumerable islands of various sizes. It often demolishes the old, and creates new ones. For the annual floods heap up the sands, which are liberally supplied with seeds of willows wafted thither by the wind; these soon take root and quickly grow up with the aid of abundant moisture. Wait a little, and you will see the island covered with willows, other trees, and turf, and haunted by birds, wild beasts, and amphibious animals. Other islands are gradually destroyed by the violence of the waves; we have seen some of them sunk under water, others rocked like a ship by the wind and the waves, and borne up and down till they are dissolved and swallowed up. The most considerable islands are Martin Garzia, Las dos Hermanas, the Island of St. Gabriel, La Isla de Flores, and La Isla de Lobos. The Parana overflows twice every year. The greater flood generally commences in the summer month December, continues during the whole of January, and sometimes does not subside till the end of February. The lesser begins about the middle of June, and lasts thirty

days. In both floods all the islands, some of which are three leagues in extent, are so entirely covered that the tops of the very highest trees are alone visible.

Tigers and stags like those of our country, which are very numerous, come out upon the shores. When the river is not contained within its very high banks, it spreads to the space of many leagues. I remember sailing near the town of St. Ferdinand, in a ship, amid palm trees, on the plain which, at other times, I used to gallop over on horseback. The waters of the Parana are muddy; but if suffered to settle in a pitcher, not unwholesome for the natives of the town; though in strangers, they occasion diarrhœa, which proved fatal to fourteen of my companions, whilst we were awaiting an opportunity of sailing to Europe, in the city of Buenos-Ayres, whither we had assembled from different parts of the province. I, also, was confined to my bed, and placed in extreme danger by it. The tide of the sea spreads full a hundred leagues up the Parana, especially when the south wind blows violently; but its waters are fresh about six leagues from the mouth of the sea.

The Parana, now distinguished by the unmerited appellation of La Plata, has five havens for sea-vessels; but perfect security is to be

found in neither of them. Ships rest in the port of Buenos-Ayres, three leagues from land, exposed to all winds and storms. The south wind, which rages most in those parts, threatens immediate destruction, unless the anchors and cables be very strong and firm. Long, light ships, called Lanchas, which are much used in this river, draw to land by the river Riachuelo, when it is augmented by the tide; for when the sea ebbs, it is too shallow to bear those vessels. Colonia do Sacramento, which lies on the eastern shore, opposite to the city Buenos-Ayres, and almost fifteen leagues distant from it, (for such the width of the river is reckoned to be,) affords a safer station for vessels, and one nearer to land, being somewhat defended against the wind by high banks on one side, and on the other by the neighbouring island of St. Gabriel, though this very circumstance of the island's being so near, as well as the hidden rocks, are great causes for apprehension, because mournfully signalized by not a few shipwrecks. The best, and, to say truth, the only port on the same shore, is that of Monte-Video, which is situated thirty leagues distant from the colony, and as many from the sea, and is commodiously defended by artillery, and by a castle which contains five hundred guards. This bay, which is about one league

and a half long from the port, and almost circular, is protected against all winds, except the south, which is very formidable here, by high shores, and by a lofty mountain visible at eight leagues distance. It is also navigable to ships of war. The little island of rabbits, La Isla de los Conejos, occupies the port. The castle of the place is so small, considering the immense sums expended upon it by the court of Madrid, that it rather deserves the name of a castlet. The island Maldonado, about nine leagues distant from the mouth of the sea, and about as many from Monte-Video, betwixt La Isla dos Lobos, and La Isla de Flores, affords a convenient situation to ships of every size, and a defence against the S. E. wind. The Governour, Pedro Ceballos, fortified this bay as well as he could with new works. Men skilled in these matters have declared it as their opinion that this post is excellently well situated, and might be made very important to the security of the province, if nature were assisted by art. On the opposite shore, towards the west, the bay Barragan, twelve leagues distant from Buenos-Ayres, affords an opportunity for repairing ships, but little security for them. For it is every where surrounded by low banks, and lies exposed to all winds. The entrance itself is not devoid of danger. The harbour is indeed

of wide extent, but, being rather shallow, the larger ships remain two leagues from land. The place has no fortifications of any kind, consisting of a very few wretched huts of hides and rushes.

As the river La Plata has but a few ports, and those not very safe ones, it consequently threatens navigators with an hundred dangers, on account of the sand-banks, and shoals which occur here and there. The most remarkable of these are two named El Banco Ingles, and El Banco Ortiz; both of which are many leagues both in length and in breadth. The danger is increased by some hidden rocks near La Isla dos Lobos, and La Isla de Flores, and still more by huge crags in the neighbourhood of the port of Monte-Video, called Las Carretas de Monte-Video, which are the more dangerous on account of their being less easy to be seen. If the pilot is not thoroughly acquainted with the river, or if he neglects to make frequent use of the sounding-line, a shipwreck is inevitable. The vessel will either be buried amid high heaps of sand, or will spring a leak from being dashed against the rocks. This may the more certainly be expected, if the river be so much disturbed by a strong south wind, as to render it impossible to make any use of the rudder; for during a tempest the waves rise

mountains high, and the violence of them is incredible. Three or four anchors will scarce hold a ship at such times. Matteo Callao, an experienced man, captain of a war-ship named La Esmeralda, when he brought us back to Spain from Monte-Video, was often heard to exclaim in the river Plata, "Let me only get clear of this devil, and I shall think myself already at the port of Cadiz." Who would not have been terror-struck at the remembrance of so many vessels which had recently perished there? That very ship in which we sailed from Lisbon had nearly been added to the number of those unfortunate ones. I will relate the affair as briefly as possible.

In Portugal, a Brazilian mulatto was hired at a great price by Feliciano Velho, the captain of the ship, because he professed himself well acquainted with the river La Plata, though he was, in reality, extremely ignorant. At the entrance of the river the captain, Joseph Carvalho de Pereira, according to custom, committed the entire management of the ship to this man; but more ignorant than a brute, he made a dangerous error at the very threshold. He took the ship to such a distance from the east shore, which it ought to have kept in sight, that nothing but water and sky was to be seen. On perceiving which, "Holloa!" exclaimed the

captain, "you will lose my ship before the sun sets!" This sudden speech proved prophetic: for leaning over the side of the vessel at about two o'clock in the afternoon, I observed that the water in a certain place was unusually disturbed, and suspecting the truth of the matter, disclosed the circumstance to the captain, who, ascending a mast as quick as possible, perceived that we were steering directly towards the English Shoal, and immediately ordered the prow of the ship to be turned towards the east; for that repercussion of the waters arose, as I suspected, from the neighbouring quicksands. About evening we cast anchor in very shallow water, so that the ship hardly floated at all. After sun-set there came on a furious tempest. While the sky bellowed with thunder, a violent south wind raised huge billows in the river, and created much alarm lest the ship, which was fastened to a muddy bottom with a very bad anchor, should be either dashed upon the rocks of La Isla de Flores on one side, or upon the English Shoal on the other; for the former were on our left, and the latter on our right, at no great distance. Consequently, the sailors were forced to toil day and night in pulling away the anchors and strengthening the cables. This formidable storm lasted two days. On St. Stephen's day, about noon, the captain thought fit to remove from this dangerous neighbour-

hood.' But after a few moments sail we were suddenly forced to cast anchor, for, by the sounding-line, sands were discovered to be close at hand.

We learnt from the Spaniards, who came by night in a skiff from Monte-Video to spy us, that we were in a dangerous situation, and near to the rocks named Las Carretas de Monte-Video. We all vainly wished for some one from the port, well acquainted with the river, to show us the way. They said there was no skiff for such a person to make use of, but that a Portugueze captain was going next day to the port of Colonia, and that this man might go before us in a skiff and conduct our ship. Him we expected next day to show us the way; but as he did not make his appearance, being probably afraid of the stormy wind, we pursued our journey, blindly wandering up and down. Thinking that we had now left behind us the shoal named El Ortiz, we sailed, even at night, without suspicion of danger. But, alas! the greatest danger is in security. About day-break the ship stuck so fast upon those very shoals from which we thought ourselves long since escaped, that for two days no industry or nautical skill was sufficient to remove it from that place. On the second night there arose a most violent tempest. The poop remained im-

moveable, being thrust into the sand, whilst the other parts of the ship were tost about with such violence, that it seemed every moment as if the joints of the planks would be loosened. About the same time a strong south wind, accompanied with continual thunder, drove such a force of water from the sea into the river Plata, that early in the morning the ship was extricated from that abyss of sands, and floated once again. Carried by the same wind, now favourable to us, we entered the port of Colonia, in safety, next day about noon. After remaining there for two days, and being much tossed about, we were removed to the city of Buenos-Ayres. In crossing this river, which is about fifteen leagues wide, many of us endured more apprehension, and felt more sickness, than in the whole ocean. For want of a better, we went in a skiff, which age had rendered rotten, worm-eaten, and ruinous. Scarcely did one part adhere to the other. The fury of the raging wind increased our fear and our danger, for as it blew against us, our sails were too much bent, and one whole side of the skiff lay under water. But all this was nothing. We gave ourselves up for lost when the rud[illegible] was thrust into the sand, and we stuck for some time with the prow lifted up in the air. But who can describe the joy we felt on beholding

the shore, and entering the port which we had vainly sought for three whole months?

I have spoken the more fully on this subject, in order to show you that successful navigation in this river depends not upon skill alone, but upon great good-fortune. Should a violent south wind arise, skill, knowledge, and experience all of no avail, the ship will be driven into places where it will either perish, or at least undergo much danger. In the year 1766, the very best skiff in the port of Buenos-Ayres, commanded by the most excellent captains in that city, being dashed against a shoal by the force of a stormy south wind, had its keel split like a nut, was divided into two parts, and utterly perished, ten Jesuits destined for the province of Chili, many Spanish grenadiers, and all the rest of the crew being drowned, except one captain of the grenadiers, who, with a boy of ten years old, seized hold, by chance, of a little boat, and arrived in safety at the opposite shore, at full ten miles distance from the place of the shipwreck. Not a single person offered to accuse the pilot of stupidity, or want of skill. Every one was aware that the foul tempest which had arisen in the night alone occasioned the shipwreck. For it appears from nautical tables and documents, that the north channel of the river is narrower and

deeper, and the south channel, on the contrary, wider but of a shallower bottom. All knew whereabouts El Banco Inglez and El Banco Ortiz, with the other well-known rocks, lay concealed. But who could even guess at these new shoals, fresh heaps of sand, which either the river with its inundations, or the sea rushing impetuously into the river, were wont to heap up? By continually making use of the sounding-line, these later shoals are indeed discovered, but often when it is too late, the waves baffling all art and industry. Wherefore the wider this river extends on each side, and the nearer it approaches to the sea, so much the more is it to be dreaded. In this one channel the river La Plata flows between the promontories of Sta. Maria and S. Antonio, which latter is also called Cabo Blanco. The priest Cyriaco Morelli speaks thus concerning the mouth of the river La Plata, in his work intituled *Fasti Novi Orbis*, "What we call the river La Plata, is in reality an immense bay of the sea, into which the waters of the Parana, the Paraguay, and the Uruguay flow." Different authors give different accounts of the width of this river where it enters the sea. Many Spaniards at this day give it sixty leagues, others fewer, and some say it is seventy leagues across. But Egidio Gonzalez de Avila, in the "*Ecclesiastical*

Theatre of the Indies," vol. ii. affirms that the river La Plata enters the sea by mouths eighty leagues in width. I leave you to form your own opinion on the subject.

I have crossed this channel twice, but must own I never measured it. It is certain, that incautious or too credulous captains are often deceived by the wideness of this vast river, which prevents them from seeing both shores of it. Trusting too much to their own fallacious calculations, they think themselves sailing on the ocean, and boldly proceed with spread sails, and without consulting the sounding-line, but at length when the ship strikes upon shoals, perceive too late that they are in the river Plata, and frequently perish. I write this on my own experience. On St. Thomas's day the ship proceeded full sail, and with a wind as favourable as could be desired. We observed little birds, never at other times seen on the ocean, flying about, bits of grass floating, and the colour of the water changed, from all which it was easy to conclude that we were near land. We represented these circumstances over and over again to the captain, a Portugueze, who, though in other respects a worthy and prudent man, relied too much on his own observations, and was somewhat pertinacious and opiniated. He insisted upon it that we were far from land,

and openly declared that he should pursue his present course, full sail, till seven o'clock at night. We should have perished had he acted according to his word. For about sun-set, a short-lived but violent gust of wind sprung up. All sails were lowered as usual. We perceived that the ship was surrounded on all sides by seals, which were the means of saving our lives by proving that we were in the perilous river La Plata, or at least in the entrance of it. For you will never see these amphibious animals in the main sea, it being their daily custom to quit the water and go upon shore. The testimony of the seals was also confirmed by the sounding-line, by which we discovered that the bottom was but a very few cubits deep. The captain, convinced of his former error, thought fit to put in practice the maxim *festina lente!* We stuck between the hammer and the anvil, when that first squall was succeeded by a tempest accompanied with thunder and a furious south wind. Lest the ship should be driven to the neighbouring promontory of Sta. Maria, or on to the shoals, the sails were placed in such a manner that the wind when it falls into one is repelled by the other, by which means the ship, floating in the same place, is prevented from proceeding. About the middle of the night, the wind abating a little, we proceeded very slowly with but one

sail. At dusk in the evening unknown tracts of land presented themselves to our eyes. At length the sun being fully risen, it was not without terror that we beheld ourselves scarce a gun-shot from the lofty rocks of the promontory of Sta. Maria. Our alarm was increased when, after repeatedly casting the sounding-line, the sailors discovered that, to the imminent danger of the ship, the bottom was but six fathoms deep. For the sea being at ebb, and the waters momently decreasing more and more, we should have been becalmed, and consequently disenabled from receding from the neighbouring rocks, where, if the south wind returned, we should be dashed to pieces, but if the calm lasted we must stick fast in the shallows. We derived safety and incredible consolation from the sun, then at the meridian, from observation of which we at length discovered whereabouts we were. Two hours after noon a gentle gale arose, which enabled us to quit the shallows and that threatening shore, and to re-enter the main sea. The wind becoming more favourable after sun-set, we stole into the very channel of the river, and about dawning got sight of La Isla de Lobos. But this short-lived joy was saddened the same day with all those wanderings and perils which I have just related. From all this you may conclude how

formidable the width of the river La Plāta is to captains of ever so long experience.

The name of the river Plata being spread throughout Europe in former times, many of the Spaniards flew to Paraguay, and after all found nothing but poverty, where they expected riches. Paraguay is surrounded by the provinces of Chili, Peru, and Quito, which abound in gold, silver, gems, and precious stones, neither of which is to be found in Paraguay. Some of them might perhaps be discovered, you will say, if properly searched for, but this I do not believe, knowing how sagacious and quick-sighted the Spaniards are in seeking for treasures concealed in the bosom of the earth; as, therefore, they have never hitherto endeavoured to dig for gold and silver, or have been unsuccessful in the attempt, I am firmly persuaded that there are none to be found; and the longer I remained in this country, the more was my opinion on that head strengthened by convincing proofs and experiments. In many places signs of hidden metal were sometimes discovered, but they served rather to drain the purses of the more credulous Spaniards than to enrich them. I will fairly relate whatever occurs to my memory relative to the attempts that were made to discover metals, and the ridiculous ideas that were entertained on this

head. I was intimately acquainted with a merchant in the city of St. Iago del Estero, who had formerly been opulent, but was at that time reduced to ruin. Hoping to become as rich as Crœsus, he directed his whole thoughts and faculties towards discovering mines. Emissaries were hired to search in those places which were thought to contain metals. At much expense he undertook a journey to the Governour of Tucuman, who lived at a great distance, to obtain from him a right to dig for gold. He spent immense sums upon workmen, mules, provision, and other instruments necessary for searching the bowels of the earth, with no reward for his pains, except spending the riches that he already possessed, without obtaining those which he promised himself under ground, and remained ever afterwards indigent and derided by all. Yet deluded by his hopes, he had still to learn wisdom. He knew that about eighty leagues distant from the city of St. Iago, was a place named Hierro, which runs out into an extensive plain covered with rich grass. Not a stone or even a pebble is to be seen in the whole vicinity. Here and there appears out of the turf a plank, or the trunk of a tree, having the appearance of iron, except that by its shining it bears some sort of resemblance to silver. The good man now thought he had

reached the summit of his wishes, for he swore that silver mixed with iron lay concealed in this place, to the great amusement of all that heard him. He gave a little piece of this metal, which he had eagerly snatched up, to a smith to be melted in the city. The Spaniards who were present privily slipped some pieces of silver money into the furnace. When, therefore, he beheld the melted mass, consisting of silver and that kind of iron flowing from the furnace, he thought himself the happiest of mankind. But understanding that he had been cheated, and cajoled, he flew into a rage, and threatened the authors of the deceit with every thing that was dreadful. An European smith, after carefully trying that exotic metal with fire, informed me that it was a sort of iron, but so hard and so brittle, that no art would be sufficient to bend or reduce it to any kind of form, and consequently that it was of no use whatever. I will tell you another anecdote of the same kind.

A certain merchant of Cordoba was involved in very great pecuniary difficulties, to extricate himself from which he forsook his old calling, and took up that of a physician, in which he was never properly instructed;—a metamorphosis by no means uncommon amongst the Europeans who reside in America. Deserters from the army and navy, if they exercise any

handicraft trade, will never find a wife in Paraguay. To obviate this objection they apply themselves to merchandise. Whoever has his shop filled with tallow-candles, cheese, knives, needles, scissors, linen or woollen neck-handkerchiefs, and some flagons of brandy, is styled a merchant, immediately becomes noble, is esteemed superior to the vulgar, and fit to make any marriage connection, or hold any magistracy. Reduced to ruin, from merchants they suddenly become physicians. These ignorant quacks, who in Europe hardly know how to shave a beard, breathe a vein, cut the nails, apply cupping-glasses to the skin, administer an injection, or spread a plaster, give themselves out for Galens in Paraguay, and slay the rich with impunity at all hours of the day. Such an one was Bartholomew. Finding his purse no way filled by the diseases and deaths of others, and being universally dreaded, he at length changed his mind, forsook his gallipots, and turned his thoughts towards metals, the last anchor of his hopes. A vague report had been spread that in the mountains near Cordoba, signs of hidden gold had manifested themselves. Having consulted those persons who were best informed on this subject, obtained leave of the royal Governours, hired men to dig, and purchased cattle to maintain them, solely on the

promise of reward, he explored, for some time, the bowels of the earth, but with no success, with great loss, and terrible expense, as it was necessary to convey both wood and water many leagues on the backs of mules. Overwhelmed with debts, which his hopes of discovering gold had led him to contract, this wretched man served to teach others that it is safer to seek for gold on the surface of the earth, than in the subterranean caverns of the Cordoban mountains. And indeed no one, that I know of, from that time forward ever thought of seeking there for mines of gold. A report was spread amongst the common people, that the Indians, before the coming of the Spaniards, had dug gold out of the mountains which surround the city Rioja. But every attempt of the Spaniards to find this noble metal in those mountains was uniformly unsuccessful. That small pieces of gold had been discovered in our times in the mountains near the city of Monte-Video, I was informed by Andonaegui, Governour of Buenos-Ayres. Though the Catholic King was made acquainted with this circumstance, no pains were ever taken to examine and excavate those mountains, it being thought that there was little hope, and perhaps no reality in the matter. Some one reported that amethysts had been found in the river Rosario, near the city of

Monte-Video; but I thought that they either were not genuine, or had been brought thither from some other place, as no one was known to have taken the pains to seek for more in the same river.

The first Spanish inhabitants entertained a thorough belief that the province of Guayra was rich in metals; and there too, they promised themselves to find abundance of precious stones. They had not yet learnt that all that glitters is not gold nor diamonds either. On the shores of the Parana, they found some stones which they called *cocos de mina*. These stones in shape are sometimes round, sometimes oval; their surface is rough and hard, and of a dark colour. In size they are equal to a pomegranate, and sometimes to a man's head. Within the outer shell they contain little stones of various colours, and great value in the eyes of ignorant persons, who take them for crystal, amethysts, rubies, emeralds, &c. But they are deceived. Jewellers rate them about as high as Bohemian stones. They say that the *cocos de mina*, pregnant with these kinds of pebbles, burst with a noise as loud as that of a gun, when what they consider the noble burden which their womb contains is mature. This appearance and these properties are attributed to them by the vulgar, with what

truth I know not, for though I have travelled over the greatest part of Paraguay, particularly the shores of the Parana, with eyes attentive to nature, I never saw a stone of this kind. I do not pretend to say that the *coco de mina* may not have its value in the other provinces of America, which produce genuine jewels, but I boldly deny that any inhabitant of Paraguay was ever enriched with one. The foolish credulity of certain persons, who, from this fallacious resemblance of jewels, hoped to gain riches, was punished with extreme poverty, as we all know. Xerez, Ciudad Real, and Villa Rica, cities formerly accounted fountains of metals and of riches, have all proved seminaries of indigence and misery. What was called Villa Rica, or the Rich City, was never opulent in reality, but only so in name, and the hopes it held out of discovering metals.

Finding no gold and silver in those parts of Paraguay which their feet had traversed and their eyes beheld, they persuaded themselves and others that these metals were concealed in the native soil of the Guaranies, whom the Jesuits had undertaken to instruct in religion. From this false conjecture, how many lies have been coined, who many calumnies launched against us! By the royal authority and at the desire of the Jesuits, there were sent men com-

missioned to search diligently if any metal existed in the Guarany territories. These explorers were attended, in the capacity of guide, by a Guarany deserter, a man of bad character. This rogue had been induced, by the gifts and liberal promises of some enemy of the Jesuits, to declare that he had seen gold mines at the banks of the Uruguay, in the land belonging to Concepcion, a town of the Guaranies, and that this place was strengthened like a fort with strong holds, warlike machines, and a numerous garrison. Thither they directly hastened, and when they were a very few leagues distant from that *golden* spot, the knavish Indian, fearing the punishment of his falsehood, which must be discovered next day, fled away in the night; but being taken in the town of Yapeyù, by the missionary himself, was sent back, chained and guarded, to the Spaniards from whom he had deserted. The cheat respecting those gold mines and fortifications was thus brought to light, and the phantoms raised by falsehood and calumny disappeared. The Spaniards examined every corner far and near; after which they unanimously and publicly declared that no mines existed in that place, nor indeed that any one, who considered the nature of the situation, could rationally expect them to be pro-

duced there. The Indian was punished for his perfidy. Certain Spaniards, who had thus falsely accused the Jesuits, were declared calumniators, punished with confiscation of their goods and public infamy, and pronounced incapable of holding any office in the state. By these royal fulminations calumny was for a little while repressed; yet the ridiculous suspicion that mines were buried amongst the Guaranies was not yet extinct; it was even propagated amongst the more credulous Europeans.

I have often laughed at beholding the eagerness and solicitude with which the Spaniards, who visited the Guarany towns, gathered up all the little worthless stones they met with on the way, and which, on account of their various colours, they thought to be emeralds, amethysts, or rubies. Every thing that was found on the Guarany soil they took for gold and jewels. Diamonds, which nature has denied to every part of Paraguay, were reported to abound in the land of the Guaranies. In the Gazeta de Madrid, I read this article, dated London. "They write from Brazil that the Jesuits of Paraguay have brought their diamond mines to such a degree of perfection, that it is greatly to be apprehended the diamonds of Brazil will decrease in value." I submitted this paragraph to the perusal of Charles Murphy,

Governour of Paraguay, and I cannot tell whether it excited his laughter or his indignation the most. I would have bought the smallest particle of a diamond at any price, to cut the glass for the various uses of the church, but could never meet with any one who possessed such a thing, and was, consequently, always obliged to make use of a flint instead. If the savages at the straits of Magellan have any metal, they must have got it from the mountains where every one knows that metals are found. But the province of Chili differs as much from Paraguay, as Austria does from its neighbour Hungary. The one abounds in gold and silver, the other is absolutely destitute of both. The Portugueze in Cuyaba, in Matto Grosso, and in the fortlet of Sta. Rosa, collect sands from various rivers, out of which they pick very small particles of gold, formerly with the connivance of the Spaniards, and since the last declaration of peace with their open consent. For the Portugueze always contended that the above-mentioned territories were comprehended within the limits of Brazil, whilst the Spaniards annexed them to Paraguay, or their own Peru. That you may perceive the truth of what I say, I will fairly describe the liberality of nature towards Paraguay. You shall see and laugh at its treasures.

At the close of the last century, Father Antony Sepp found out a method of extracting a small quantity of iron from stones named *ytacurù*, by dint of a very hot fire kept up for twenty-four hours. But he had scarcely any imitators; for the quantity of iron obtained was so inconsiderable, in proportion to the labour and firewood spent upon it, that it was not thought worth the trouble. These stones, which are composed of a number of very small pebbles, are of a dusky colour, mottled with black spots. In our times, somewhat more iron has been brought in the Spanish ships, but even now it is sold at a price incredible to Europeans. All the Guarany youths, on their marriage-day, and the married people at the beginning of January, receive from the Jesuit, the priest of the town, a common knife to use at table. This donation is more expensive than Europeans may imagine, as some of the towns contain four thousand inhabitants, some six or seven. Yet, notwithstanding the dearness of iron, none of us ever thought of procuring a trifling quantity of it, with immense labour, from the stones named *ytacurù*.

Out of the Cordoban mountains, they sometimes dig *talc*, a sort of softish white stone, very light, and of no firmness. It consists of slender laminæ, so that it may be divided with a knife into small plates, and is sometimes dipped in

water. When slightly burnt, it assumes the softness of paper and the colour of silver, and is used to make little images and other figures to adorn poor churches. Out of the numerous leaves of which this stone is composed, you will find few entirely white and transparent, for most of them are darkened with black or yellow spots. The better ones supply the place of glass in windows and lanterns; for that article was extremely scarce and dear, in 1748, when I arrived in Paraguay. I could not see one glass window in the chief colleges of the province, nor in the towns of the Guaranies. Every one made his own window of the stone talc, (which is difficult to procure,) of paper, or linen cloth; and as these substitutes were torn away by every shower or boisterous wind, was continually under the necessity of making repairs. But in the last years of my residence in Paraguay, a quantity of glass was brought thither in the Spanish ships, and the price being reduced, the houses and churches shone with glass windows. In the churches, where they look towards the south, instead of a glass window, they place a hard, white, and transparent stone, which is a kind of alabaster, and is brought at a great expense from Peru, its native soil. For the south wind, which is excessively violent in South America, at the first gust breaks all the glass that

opposes its fury, often levelling whole houses, breaking enormous masts of large ships, and tearing up lofty cedars by the roots. Stones fit for making lime are to be met with in almost any part of Paraguay, but they are not found in the territories of the Abipones and Guaranies. The shores of the Paraguay and other rivers afford gypsum. The Guaranies, who dwell at a distance from these shores, make use of burnt snails' shells, or of a chalk like fuller's earth, which they call *tobaty*, in whitening their houses. At the banks of the greater Tebiguary, I sometimes saw marble of a black colour, spotted with green, but of very small dimensions. I know not whether any other marbles or remarkable stones are concealed in the bosom of the earth elsewhere. Red and black flints, containing plenty of fire, and extremely fit for muskets, may be seen in many places, especially at the banks of the Uruguay; but instruments to cut them, and fit them for the use of muskets, are wanting. Whether Paraguay produces alum, sulphur, and mercury, I do not know.

Many have committed mistakes who have written concerning Paraguay, in that country itself. They have liberally bestowed treasures upon it, not because it really possesses them, but because they have dreamt of them in a country utterly destitute of all metals. The blind man dreamt that he saw, as the Spanish

proverb goes, and he dreamt of what he desired. *El ciego soñaba que veia, y soñaba lo que queria.* To this number belongs Martin del Barco, Archdeacon in the city of Buenos-Ayres, who, in his poem intituled *Argentina, y Conquista del Rio de la Plata,* affirms that pearls are formed in some lake, near which the Abipones inhabit. The oldest of the Indians, the most distinguished for experience and veracity, who were born in that neighbourhood, and had dwelt there for many years, all answered, with one accord, that they had never seen any pearls, nor heard any thing about them from their ancestors. Would not these savages, who continually adorn their necks, arms, and legs, with glass beads brought from Europe, with little round globes made of cockle-shells, with the seeds and kernels of various fruit and the claws of birds, would not they have grasped eagerly at pearls, which are naturally so bright, had they ever met with any? We may therefore safely pronounce this lake, said to produce pearls, a mere fable, long since expunged from history by all sensible persons.

Silver vessels are seen in the houses of the Spaniards, and silver utensils in the churches of the cities. In the Guarany colonies, not only the altars, but sometimes the very ceilings are gilded. This I do not deny. But all that gold and silver was not created in the bowels of Pa-

raguay, but brought from the provinces of Chili or Peru. The Guaranies make very large brass bells for their own churches, or for those of the Spaniards; but the people of Chili supply them with brass. No money is coined in any part of Paraguay in the name of the King, or of any other person.

Excepting a few cities, which carry on commerce with European ships, or with the neighbouring people of Peru, and Chili, and the Portugueze, money is used very rarely, if at all, its place being supplied by the exchange of commodities, as amongst the ancients. Horses, mules, oxen, sheep, tobacco, cotton, the herb of Paraguay, sugar, salt, various kinds of grain, fruits, vegetables, the skins of animals, &c. are used instead of money in Paraguay; with these all necessaries are purchased, and the usual stipends and taxes paid to the bishops, priests and governours, especially in the district of Asumpcion. The prices of all natural productions are regulated by the magistrates, and are diligently learnt and observed both by the seller, and the purchaser. In a very few towns, where money is used, we find only three kinds of silver coins, namely, the *peso fuerte, peso de plata,* or *patacon,* which is equal in value to a Spanish crown, or to two German florens: the *real de plata,* and the *medio real de plata;* the first of which is equiva-

lent to five German *groschen*, the other to seven *cruitzers* and a half. You never see any gold or copper money. The Indians in the towns entrusted to our charge are entirely unprovided with money, and the Jesuits likewise, except that we had fourteen silver pieces, or as many rials, or *medios reales de plata*, in every town. For these pieces of money, according to the custom of the Spanish church, in public weddings, are given by the parish priest to the bridegroom, and by him to the bride, as a dowry, but are afterwards returned again to the priest, that the same money, and the same nuptial rings, may serve over and over again. I think that you may aptly apply to Paraguay what was said of Germany by Tacitus, De Moribus Germanorum: *Argentum et aurum propitii, an irati Dii negaverint, dubito.* If liberal nature had there created gold and silver, if art and industry had discovered those metals, the Spaniards would long since have left off breeding cattle, and cultivating the celebrated herb, both irksome employments. The Indians, who must then have been occupied in digging metals, would have shunned both the religion and friendship of the Spaniards, since they found them coupled with slavery; and we Jesuits should never have induced so many savages to embrace our religion; so that the want or ignorance of metals

may be reckoned amongst the divine blessings and advantages of Paraguay.

Though Paraguay is entirely destitute of metals, yet it can by no means be called a poor country. It abounds in things necessary for human subsistence, and especially in all kinds of cattle. The whole world does not contain a country more numerously supplied with oxen, horses, mules, and sheep; which were formerly brought to Paraguay, and in the course of two hundred years increased marvellously, both on account of the richness of the pastures, and the unbounded liberty they possessed of wandering up and down the plains, both by day and night, at every time of the year. The quantity of kine which exists there is scarce credible to a European. Fifty years ago, when all the plains were covered with wild oxen, travellers were obliged to send horsemen before them to clear the way, by driving away the beasts which stood threatening them with their horns. It is, therefore, no wonder that at that time a full grown ox was sold for five *groschen*, (a *real de plata*,) as appears from the old books of valuations. Every Spaniard who intended to enlarge his estate hired a troop of horse, who brought him eight, ten, or more, thousands of cows and bulls from the country, within a few weeks. Do you desire to be made ac-

quainted with the shape of the Paraguayrian oxen? In height they equal those of Hungary, and generally surpass them in the size of their bodies, though not of the same, but of various colours. With a sort of ferocious arrogance they imitate stags in the manner of holding their lofty heads, and almost equal them in swiftness. Unless a long drought have impoverished the pastures, every ox yields such a weight of fat, that two robust men are sometimes scarce able to carry it. The fat of oxen is always used instead of butter in culinary preparations; for the cows are very seldom milked, on account of their ferocity; the taming of them is a long and laborious process, and consequently odious to the slothful Spaniards and Indians. When tamed, they will not suffer themselves to be milked, unless their feet are tied and their calf is standing beside them. Sometimes the mothers are sent with their calves to the pastures, return home at evening of their own accord, and are separated at night, unless their milk has been exhausted by the calves—on which account milk and cheese are very seldom used in Paraguay, butter scarcely ever. A butcher and shambles are words unknown to the Paraguayrians. Every one slays his oxen at his pleasure. The poorer sort do not buy pounds of meat, as is customary in Europe, but

a part of a slaughtered ox, which they generally owe to the liberality of the rich. Two or three young men are sufficient to kill the most furious bull. One throws a noose of leather over his neck, another casts one round his hind legs, and cuts the nerve of one of them, then, leaping on his back, fixes a knife in his neck; thus the ox falls, despatched at one blow.

An ox-hide, which measures three ells from the head to the tail, and is called by the Spaniards a legal hide, is bought by merchants at six German florens, though a whole live ox is sold for only two florens amongst the Guaranies, and for four amongst the Spaniards; for the labour employed on hides, even before they are dressed, increases their price. They are carefully fastened to the ground, to be dried, with wooden pegs, under shelter, in a place where the fresh air is admitted; and lest moths should gnaw or strip them of their hairs, for thirteen or, at least, eight days, the dust which ingenders these insects must be diligently beaten from them with a stick. This labour, which was often continued for many months, whilst some thousands of them were disposed of, is rated very high by the Spaniards who sell them. It is incredible what art and industry are employed in stretching hides, which come a little short of three ells, to the usual size, though when made as thin as

paper they are totally useless to European curriers, on account of whose complaints this stretching of hides has long since been prohibited. The Spaniards, finding that the trade in hides was by far the most profitable to them of any, were possessed with a blind rage for killing all the oxen they could lay hands on. For this purpose, troops of horse were perpetually traversing those plains which abounded most in wild cattle. The horsemen employed have each separate tasks assigned them. Some furnished with swift horses attack a herd of oxen, and with a long spear, to which is added a sharp semicircular scythe, disable the older bulls by cutting the nerve of the hinder foot; others throw the halter on them whilst they are staggering, and others follow behind to knock down and slay the captive bulls. The rest are employed in stripping the hides off the slaughtered animals, conveying them to an appointed place, fixing them to the ground with pegs, and taking out and carrying away the tongues, suet, and fat. The rest of the flesh, which would suffice to feed a numerous army in Europe, is left on the plain to be devoured by tigers, wild dogs and ravens; and indeed one might almost fear lest the air should be corrupted by such a quantity of dead bodies. In an expedition of this kind, lasting several weeks, the person at whose

expense it is undertaken is supplied with some thousands of hides. This custom of hunting and slaughtering oxen, being continued for a whole century, exhausted almost all the plains of wild cattle. You no longer saw those public and immense herds of innumerable oxen, which belonged to no one in particular, but might be appropriated to the use of any. It must be attributed to the extensiveness of the plains, and the fertility of the soil, that in the Paraguayrian estates the number of oxen is still so great that Europe may envy, but cannot hope to equal them. At this day a fat ox may be bought for four florens amongst the Spaniards, and two amongst the Guaranies. In the first years that I spent there one floren was the universal price, but as the number of herds was daily decreasing, the price increased in proportion. I have known Spaniards who possessed about an hundred thousand oxen in their estates. The town Yapeyù, which was dedicated to the three kings, contained fifty thousand; that of S. Miguel many more, but not one superfluous. At least forty oxen were daily slaughtered to satisfy the appetites of seven thousand Guaranies. Add to these the oxen which are privily slain by the Indians, either in the town or the estate, and those which are daily consumed by hostile savages, by tigers, wild dogs, and worms which are

bred in the navels of calves. Every merchant's ship transports thirty, and sometimes forty, ox-hides into Europe. Who can reckon the number of hides daily employed in manufacturing ropes, building hedges and houses, and making trunks, saddles, and wrappers for the herb of Paraguay, tobacco, sugar, wheat, cotton and other things? The common people amongst the Spaniards have no other bed than an ox-hide stretched upon the ground, which is also the case with an innumerable crowd of negro slaves. Beef is the principal, daily, and almost only food of the lower orders in Paraguay. Moreover that quantity of meat which would overload the stomach of a European is scarce sufficient to satisfy the appetite of an American. A Guarany, after fasting but a very few hours, will devour a young calf. An Indian, before he lies down to sleep, places a piece of meat to roast at the fire, that he may eat immediately when he wakes. Place food before him, and the rising and the setting sun will behold him with his jaws at work and his mouth full, but with an appetite still unsatisfied. Such being the voracity of the inhabitants, and so continual the slaughters of innumerable oxen, you will agree with me that Paraguay may be called the devouring grave, as well as the seminary of cattle.

Besides this incredible multitude of oxen, Paraguay breeds an infinite number of horses, all sprung from seven mares which the Spaniards brought with them. The whole of that plain country, extending from the river Plata full two hundred leagues in every direction, is covered with droves of wandering horses, of which any person may catch as many as he likes, and make them his own property. Some horsemen, within a few days, bring home more than a thousand horses from the plain. A hunt of this kind is performed in various ways. Some catch every horse they come near with a leathern cord. Others construct a hedge with a wide entrance like the sleeve of a garment, through which they drive a herd of horses, separated from the rest, into the inclosed space, where, after they have been confined for some time, hunger and thirst render them gentle, and they are easily led away wherever the owner chooses, in company with other tame horses. Sometimes a part of the plain is burnt. The horses crowding eagerly to crop the new grass, are surrounded on all sides, and forced away by the hunters. There were some who secured the mares that were taken in this manner, by slightly cutting the nerve of the hinder foot, to prevent their running away. A horse of this kind of either sex, when brought from

the country, and before it is accustomed to the saddle and bridle, is sometimes bought for ten or thirteen cruitzers. The colts of the mares are given gratis to the purchasers.

Horses in Paraguay are valued, or the contrary, not according to their colour, or the conformation of their bodies, but chiefly according to their natural method of going, which is of four different kinds. The most esteemed are those which have not the common trot, but move very gently, and when spurred begin to amble, so that the rider might hold a cup full of liquor in his hand, and not spill a drop. They are either born with this kind of pace, or are taught it by art. If the mother be an ambler, though the father may not have been so, the colt will generally prove an ambler also; but more certainly if both parents have been of that kind. The young horses that are most remarkable for beauty of form, and for strength, are selected from the rest, and taught that easy and swift manner of moving. Their fore feet are fastened to their hinder ones in such a manner, that, though still able to walk, they cannot practise their natural method of leaping, which is so unpleasant to the rider. Others tie to the feet of the young horse a round stone, wrapped up in a skin, which strikes his legs when he attempts to trot, and makes him endea-

vour, through fear of the pain, to walk gently. This method of teaching is practised in all the Guarany towns. An ambling nag goes two leagues in the space of an hour, unless impeded by the roughness of the road; nor can a common horse keep up with him, unless spurred by the rider to a gallop. But the natural pace of those horses which the Spaniards call *trotones*, the Abipones *nichilicheranetà*, and the Germans *trabganger*, is very unpleasant to the rider; for they lift up their feet like pestles, violently shaking the rider's body: yet as they tread firmly, and lift up their feet at every step, they stumble seldomer than the amblers; which, scarce raising their feet from the ground, and uniting the greatest swiftness to gentleness, by striking their hoofs against stones, roots of trees, and hard clods, more frequently fall and throw their rider, especially when there is no beaten path. In long journeys, especially through rugged places, it is best to make use of those horses between the amblers and the trotters, which, as they approach more nearly to the human method of walking, fatigue the rider less, are not so soon fatigued themselves, and are not so apt to stumble.

Much are those historians mistaken, who have persuaded the celebrated Robertson that the American horses have small bodies, and no

spirit, and that they are mere dwarfs and spectres in comparison with those of Europe. I boldly affirm that the Paraguayrian horses differ nothing from those of our own country in size, shape, and good qualities. You meet everywhere with horses of lofty, or of middling stature; some well fitted for a vaulter, and others for a man armed cap-a-pié. Pygmies, like Corsican horses, are as rare in Paraguay as comets in the sky. I allow that Paraguay is as yet unacquainted with horses like the natives of the Styrian mountains, which almost resemble elephants in their immense back, huge limbs, and broad hoofs: this country produces slenderer horses, better adapted for riding and racing than for chariots and waggons. But were they fed like those of Europe on oats and barley, and defended in a stable against the inclemencies of the weather, they would very probably grow to the same size. The horses of Paraguay are born out of doors, and remain there, night and day, the whole year round; are fed upon any grass they can find, (which is not always either very good, or very plentiful,) and upon leaves of trees, or dry wood; they often seek in vain for water to quench their thirst, and find it neither good, nor in sufficient quantities. Being constantly in the open air, they are exposed at one time to the scorching sun;

at another to continual showers; sometimes to hoar-frosts; when a south wind is up, to bitter cold; and at all times and places to the stings of flies, gad-flies, and gnats, infinite swarms of which flit up and down. I attribute it to these causes that the horses of Paraguay never attain to the size of the Styrian, Holsatian, Danish, and Neapolitan horses. During the winter months, the former grow lean from feeding upon poor grass, and their hair becomes darker, but at the return of fine weather, they regain their strength and natural colour. They fatten so much in fertile pastures, abounding in grass and nitre, that you might count money upon their back, as on a table—a common saying in regard to very fat horses amongst the Spaniards. But though the richness of the grass greatly fattens the Paraguayrian horses, it never gives them that strength which European horses derive from food composed of oats, barley, straw, and hay, which enables them to bear a rider, and to draw a cart, every day, and all day.

All the different colours, by which horses are distinguished in Europe, are to be found in those of Paraguay. They are oftener, however, white, and chesnut-coloured, than black or bay; a circumstance which gave me much surprize, as men born in the same climate, whether of European or American parents, are almost always

distinguished by very black, coarse hair. White and chesnut-coloured horses are indeed very pleasing to the eyes, and possess great gentleness and docility; but experience has taught me that they are much sooner fatigued, and seldom possess that strength which we see in horses of a black or reddish colour, especially those in which the red resembles the colour of toasted bread: the patience with which these horses endure labour, and travelling, is expressed in an old Spanish proverb, importing that they will die before they are fatigued: *Alazan tostado antes muerto, que cansado.* We have, however, frequently found white horses sprinkled with black, with black manes and tails, to possess a great deal of strength. The same may be said with regard to the darker bays, which have manes and tails of a blackish colour. Pybald horses in Paraguay are thought crafty and dangerous; nor are they slandered in this respect, as I have frequently found to my cost, although I may truly say that I never bestrode a Paraguayrian horse, of whatever colour it might be, with that confidence and security which I feel in mounting an European one; for many of them are apt to wince, and be stubborn, to stumble and throw their rider, and almost all are startlish and fearful, being terrified at any sudden noise, or the sight of any

strange object; whereupon, if the bridle be neglected they will stand with their head lifted up to the breast of their rider, or rear, and throw him off, or fling him to a distance, if he be not very firmly seated.

In such a vast multitude of horses, there is necessarily great variety. You will see some handsomer, stronger, and swifter than others, as in Europe. Those which have a broad breast, a small head, large and black eyes, short and pricking ears, wide nostrils, a bushy mane, a large and long tail, hairy feet, a small belly, a wide round back, straight slender legs and hard hoofs, not indented, like a comb; those which, with playful alacrity, provoke the rest to fight in the plain, leap ditches without the least hesitation, cross marshes quickly, and, as soon as they are released from the saddle and bridle, joyfully roll themselves on the ground, are esteemed superior to all others in Paraguay. Those born in rough, stony situations are preferred to the natives of a soft, clayey soil; for this reason, that if you remove a horse accustomed to such places, to soft, marshy plains, you will find him slacken his pace, and walk slowly and timidly for a long time. This fear is occasioned by the earth's yielding to their hoofs. But a horse bred on a soft soil, when brought to stony places, and gravelly roads, will often stumble

and get lame—his hoofs being bruised, and even made bloody by the roughness of the stones. Horseshoes are never used in Paraguay, though that country abounds in rocks and stones. A horseshoe would cost more than any horse, on account of the dearness of iron, and moreover because blacksmiths are not even known here by name. The experience of many years has taught me that horses, wherever they are born, in a few months grow accustomed to any soil. Mares kept for the purpose of breeding have their manes and tails shorn by the Spaniards, that they may fatten sooner, for I know of no other reason. But horses kept for riding are adorned with a long bushy tail, which increases their beauty and value. Even the meanest negro slave would think it an indignity and a punishment were he ordered to ride on a horse that was deprived of its tail. The Indians think we are jesting when they hear us say that in Europe there exist men who cut off the tails of their horses, and reckon it an improvement; for they think that a handsome tail is not only a great ornament to a horse, but likewise his instrument of defence, with which he drives away the swarms of flies and gnats. A Spanish priest, of an advanced age, who had long been in a bad state of health, had in his possession a horse of an extremely gentle disposition, as

well as of a quick and easy pace. This horse the old man made use of, in preference to innumerable others that he possessed, in all his necessary journeys. A certain Spaniard had long wished for the horse, and vainly offered to give for it whatever price the owner chose. Impatient of repulse, he dared to threaten that, unless the old man would sell the horse of his own accord, he should steal it from him. The owner, fearing that he would have very little difficulty in accomplishing his threat, said to his servant, "Go, and cut off the tail of that horse of mine: it is better to lose a part of him than the whole. When deprived of his tail he will be laughed at by all who see him, but he will at least be secured from thieves. I would rather be derided myself for using a horse without a tail, than have all my bones and limbs jolted to pieces, like pepper in a mortar, by any other trotting beast." To mutilate the tail of another person's horse, is a bitter and not uncommon kind of revenge amongst the lower orders of Spaniards; it is also thought an insufferable insult for one man to call another *un rabon*, a horse without a tail.

To keep horses in good condition, or make them so, it is of much importance that they be kept extremely clean; for if their skin is covered with dust, their mane uncombed, their

tail full of scurf, and their hair matted together, the perspiration is obstructed by the pores being stopped up, and consequently they, by degrees, grow lean and scraggy, or get the mange. On this account, the Spaniards and Abipones, who are most careful of their property, though less solicitous than Europeans about combing, washing, and rubbing down their horses, and unprovided with instruments for those purposes, take great care to prevent their growing dirty, though they have no other stable than the open plain, day and night, during every part of the year. If thistles, thorns, and other prickly plants of that kind stick to their tails, they carefully extricate them by anointing their hair with tallow. After performing a journey, when the harness is taken off, they wash and wipe the back of the horse, which is bathed in perspiration, and lest the coldness of the air should cause it to swell, keep it covered, for some time, with a horsecloth. Moreover the health and liveliness of horses are best preserved by taking care that their pastures be not situated very far either from clear lakes or limpid rivers, where the horses may drink and bathe at their pleasure; for in the winter months the cold air makes them lean and mangy, and the frequent droughts produce the same effect

in the summer season, unless they have an opportunity of laving and swimming.

In the plains of Paraguay, which abound in cattle, not only are numerous snakes concealed in the grass, but even many herbs, more noxious than the most deadly snake, present themselves to their hungry jaws. The commonest of these is that which the natives call *nio*. It has a tall stalk with a yellow blossom, but contains a deadly poison. Horses after feeding upon it are seized with a feverish trembling, which terminates in death. Horses born in places which produce this poisonous herb, devour it with impunity, but are always contemned as feeble and incapable of enduring the fatigues of a journey. The Spaniards use the following method to prevent their horses from tasting this deadly food. When marching against the enemy, they daily send forward some of their companions to explore the whole country round about where the horses are to feed. Whenever they find any of those poisonous herbs they pluck a few, tie them into a bundle, and set fire to them, so that the smoke arising from thence is conveyed by a contrary wind to the troop, and the smell of it inspires them with a horror of the pestilent herb. For though they eagerly crop the rest of the grass, they leave that untouched. But alas! there

are many other instruments of death, tigers, serpents and worms, by which an incredible number of horses are yearly destroyed. The worms which gnaw the horses are occasioned by the saddles made use of in Paraguay. Those that are made of dressed leather are stuffed with two bundles of rushes, which lie upon the ribs of the horse in such a manner, that the saddles do not touch the spine of the back. They are quite unprovided with cushions, in the place of which, the back of the horse is covered with four ells of woollen cloth, folded up together, and on this, by way of harness, they place the horsecloth of softish leather, variously embossed and adorned with figures. All this is placed beneath the saddle, that it may not hurt the horse's back, on which, that the rider may sit the easier, is placed a sheep's skin, or an ornamented horsecloth of sheep's wool, died of various colours. The saddles are fastened on the horse's back, not with a hempen girth, but with a thong of cow's leather, so that there is no need of buckles. The wooden stirrups, curiously carved, and plated with silver, in use amongst the better sort of people, are called by the Spaniards *baules*, baskets; for they really are little baskets, entirely inclosing the rider's feet, and covering, and defending them against the injuries of the weather and the road. But

if the horse fall suddenly, and throw his rider, stirrups of this kind are very dangerous, as it is more difficult to extricate the foot quickly from them than from those of Europe. The stirrups which the Spanish peasants, who never wear shoes, make use of, are likewise made of wood, but the opening is so small that nothing but the great toe can be inserted into it. The savages, according to the custom of their ancestors, do not use stirrups, and most of them are unfurnished with saddles even. The Paraguayrian bridles, also, differ from those of our country in size and shape. The Indians make use of a bridle composed of transverse spikes of cow's horn, like a hurdle, which fills the whole mouth of the horse. The spurs of the Spaniards are very large, and furnished with pegs, with which they rather bruise, than prick, the sides of the horse. They abhor the small sharp European spurs, with which they think that horses are easily wounded and infuriated. This is the whole furniture used for horses, in Paraguay. I will now give you some account of their diseases, and the remedies for them.

It frequently happens that the friction of a rough horsecloth, or the hardness or compression of the saddle galls the back of the horse; and if, after long fatigue, his horsecloth be taken off, whilst he is still smoking with sweat,

it is swelled by the sudden admission of the cold air, or of rain, till the tumour by degrees grows into a wound. The ulcerated and bloody flesh is quickly infested by swarms of flies, the eggs and filth of which ingender white worms, Delay is dangerous; for the worms increase rapidly every hour, and creep to the interior parts of the animal. If you wish to save your horse, you must immediately dig the worms out of his flesh with a small stick, and stop up the cavities where those insects lay with chewed tobacco leaves, the bitterness of which kills the worms, drives away the flies which breed them, and prevents the progress of corruption. The scar must be anointed with tallow every day, that fresh hair may grow there. The Indians smear their horses' backs either with the root *guaycuru*, well masticated with their teeth, or with melted tiger's fat, or with the shell of the *armadillo* burnt to ashes; but these remedies seldom effect a complete cure. From a book of Father Martin Szentivan, a Hungarian, on the treatment of animals, I learnt a remedy much superior to any of those American ones, and which has been successfully adopted by many Paraguayrians. Salt, well ground, and mixed with vinegar and yolk of egg, is applied to the horse's back once a day, as it cleans away the blood, keeps off worms, and in a few days

removes the swelling, and renews the skin and hair. The same author advises the application of a white onion, pretty well roasted. We ourselves have seen many horses preserved by both remedies. Certain large birds, of various colours, carnivorous, and of the vulture kind, may aptly be called horses' physicians; for they perch upon their ulcerated backs, and are deterred by no kicking from taking away the blood and the worms; though with their sharp beaks they very often enlarge the wound. Bats, also, greatly exceeding those of Europe in number and size, not only molest, but even injure the horses. Vast numbers of them fly up and down the plain. They sit upon the horse, and whilst they wound his back with their bills, create a gentle breeze by the continual motion of their wings, lulled by which the horse makes no resistance, and suffers his blood to be sucked by the bat. The wound that remains, unless it be sprinkled with hot ashes, soon swells, and by degrees becomes ulcerated, which clearly proves that bats are in some measure venomous. Showers continuing day and night, for many weeks, necessarily deluge the whole plain country with water, and the horses can find no dry land whereon to place their feet. Hence, from feeding so long, immersed in water, their hoofs are softened to

such a degree, that being unable to stand on their feet, and to seek pasture, they perish, though perfectly healthy in other respects. Sometimes horses labour under strangury, or dysury. A Spaniard saddles a horse afflicted with such a disease, instead of physicking him, and spurs him to a full gallop, till he is covered with sweat. Nor is there any occasion to repeat the operation. A horse, which was in a dying condition a little before, soon recovered, for he inundated the plain. Sometimes horses are seized with convulsion of the nerves, or with rheumatism, so that they cannot stand on their legs; on such occasions the Spanish soldiers tie their feet with a rope, and lay them on the ground, then throw plenty of urine on their legs, and kick them several times with their heels; when untied they mount and compel them, however unwilling, to run. This violent, but speedy method of healing, I found, to my surprize, attended by the desired effect. As Paraguay swarms with horses, in as great number as insects, she cares very little about curing them when they are sick. In Europe, where horses are scarcer and more valuable, we cannot wonder at their having many physicians and many medicines. What if I should say that, in Paraguay, both are unnecessary? For there it is plain that horses are afflicted with

less frequent and less heavy complaints; because they generally enjoy their full liberty, wander up and down the plains at will, breathe the pure air of Heaven, feed on the fresh grass, drink and bathe at pleasure in running streams, are never employed in bearing burdens and drawing carts, and are consequently more healthy and spirited than European horses, which, during the greatest part of their lives, are chained, like thieves, in dark stables, which resemble dungeons, are obliged to fill rather than refresh their stomachs, with hay dryer than a stone and straw harder than a board, taste oats seldomer and more sparingly than country people do cakes, and endure frequent and long hunger and thirst, sometimes through the dishonesty or laziness of servants, sometimes through the avarice of their masters, who are more anxious about employing than about feeding their beasts; not to mention the continual annoyance they undergo from the putting on and taking off of their iron shoes; and even the pain frequently inflicted on them in this operation from the awkwardness of blacksmiths. All these circumstances considered, instead of wondering that the horses of our country are subject to so many diseases, I rather feel surprized that one remains alive.

Mules in company with horses fill the plains

of Paraguay, nor shall they be separated in my relation. You will see many of them equal in height to horses, but, on the other hand, the major part are less than those which Italy or Spain produces. You may judge of the multitude of them from this circumstance, that Paraguay yearly sends about eighty thousand to Peru, in return for which she receives all the silver to be seen in her churches and houses, with no inconsiderable advantage. For unbroken mules, two years of age, valued, generally speaking, at three Spanish crowns in Paraguay, fetch ten and often fourteen in Peru. Who can reckon the number of mules, employed either in bearing burdens or in carrying a rider, in the cities and estates of Paraguay? Many thousands of them are constantly occupied in conveying the herb of Paraguay from the woods to the cities, and numbers are yearly sacrificed both to the roughness of the road and the cruelty of their drivers. I have known estates which contained four thousand mules, and many more thousand mares kept for breeding mules.

The young mules, at two years old, are taught to carry burdens or to bear a rider; but being extremely wild, occasion their instructors continual trouble and danger. However docile and obedient they may have appeared in times past, you never can entirely trust to them. For as

the Spanish proverb goes, a mule will serve his master seventy years, that he may kick him to death at last. Broken legs, bodies dragged along the ground, cut hands, heads dashed against trees or stones, and other accidents of the same nature, mournfully confirm the truth of this adage. For mules, though stronger than any horse, though accustomed to traverse woods, rocky places, and trackless plains, with both a firmer and gentler pace, and though less liable to hurt their feet, are much more to be dreaded by their riders, on account of their being constantly suspicious of danger. All of a sudden they halt on the road astonished, smell the grass, prick up their ears to listen, and with eyes wandering in every direction descry the most distant objects. The uncommon colour of a plant, a strange smell, the piping of birds, the rustling of trees, or an unusual agitation of the leaves occasioned by the wind, fills them with suspicions of the approach of a tiger, especially at dusk, or at dark night. Presently, seized with sudden terror, they run away with their rider, and unless he be possessed of great presence of mind, either throw him on the ground or drag him along with his feet sticking in the stirrup. The kicking of mules is very dangerous, on account of its being so quickly and frequently repeated. These animals, there-

fore, are never more to be dreaded than when they are themselves afraid, for at such times they become unmanageable, and seem as if they had lost their senses. As the trade in mules is lucrative in Paraguay, it is also dangerous to the merchants, on account of the exceeding timidity of these animals. Ten thousand mules, entirely free and without bridles, are often driven, by a few Spanish guards, in one drove. At the slightest alarm they all take to flight, hurry over the plain, and hide themselves in interminable deserts, whilst no industry in the horsemen, nor swiftness in the horses, is sufficient to bring them back again. Many have been ruined by mules running away and being lost in this manner.

I have been acquainted with men, in other respects brave and intrepid, who, warned by the danger of others, resolved never in their lives to ride on a mule. I have known many more, who, scorning the most excellent horses, would never travel on any other animal. Neither is this preference to be condemned, for mules, though fearful and treacherous, possess many good qualities which do not belong to horses. Their pace, especially that of the amblers, is easy and firm, by which means they always tread with safety, whether they have to ascend rocks or to creep over marshy places, though horses are better for

crossing deep marshes and rivers, on account of their height. One mule is sufficient in a long and difficult journey which would fatigue four horses. Mules are contented with the readiest and coarsest food, though generally fat and sleek. Many of them surpass the swiftest horses in speed, as I have often observed in the races of the soldiers. They are longer lived than most other beasts. In the town of S. Joachim I had mules more than thirty years old, which would bear a rider, and sometimes contrive to kick him off too. Moreover they are possessed of athletic strength, for they are accustomed to carry almost four hundred weight, in journies of many months, through very rough roads, when laden with the herb of Paraguay. In a word, I am unable to determine whether the virtues or vices of mules preponderate.

By the right of relationship asses should be spoken of between horses and mules. They wander by crowds in the plains of Paraguay, and with their braying prevent the neighbouring inhabitants from the enjoyment of sleep. In Italy and Portugal the ass is a very much employed animal, and used both for the pannier and the saddle. In Paraguay they enjoy a perpetual exemption from labour. In the larger estates great numbers of asses are maintained for the purpose of breeding mules. The female

asses are less prolific than you would imagine, but we were never able to discover the cause of their sterility. Asses continually fall a prey to tigers, especially those kept to breed mules, which they prefer to the common sort. No American ever accused asses of pusillanimity, for they bravely repel any tiger, whom they see approaching, with their heels, and defend themselves more pertinaciously than horses; but being here, as every where else, stupid and dilatory, are generally vanquished by the swiftness or cunning of tigers. The Spaniards also kill a great number every year for the sake of the fat which they have in their necks, and which is used, by tanners, to dress and soften stags' skins, and for other purposes. In this vast abundance of horses and mules which Paraguay rears, would not the most needy of the Spaniards or negroes be ashamed to ride upon an ass? But in the territories belonging to Rioja and Catamarca, where horses are not so abundant, the lower orders of Spaniards do not disdain to saddle asses. By a useful edict we took care to prevent the Guaranies from possessing horses, to deprive them of the dangerous opportunity of wandering. Persons of both sexes made use of their own asses to carry home the produce of the neighbouring fields. But those charged with guarding cattle and

other offices in the town, always had horses and mules prepared and in readiness.

Paraguay also abounds in numerous flocks of sheep, no ways differing from those of our country. Some of the Guarany colonies have counted thirty thousand, others fewer, according to the number of inhabitants and the size of the pastures. The wool was used chiefly for the clothing of the male Indians, for the women covered themselves with a piece of white cloth made of cotton. An Indian is never content unless he has his belly well filled, and his body well covered; so that a number of sheep and oxen seemed requisite to the preservation of these colonies, the latter supplying meat for food, and the former wool for clothing. Sheep, on account of their tenderness, demand greater care than the larger cattle. Hence we were extremely solicitous to supply them with diligent and faithful shepherds, whom we frequently admonished to bring the flock at stated hours to the folds, which being furnished with a roof, though not with walls, commodiously defended them against the night dew, the heat of the sun, and the attacks of lions and tigers; not to send the sheep into the plain till the sun and wind had dried up the dew; carefully to keep them from marshy places, from the dewy grass, and from thistles and thorns; for too

much moisture affects sheep with a mortal cough, and thorns tear their wool; and, lastly, to look about anxiously for pastures abounding in nitre, wholesome grass, and plenty of water. Shepherds should take great care to collect the young lambs, as soon as they are yeaned, and remove them to a safe place, where they may be suckled and licked by their mothers. Should this precaution be neglected, they will certainly be crushed under foot by the old sheep. It is also proper to see whether they are afflicted with worms, which are often bred in the wool. It conduces much to the enriching an estate to distribute the whole flock, consisting of ten or thirteen thousand sheep, into lesser companies, and to assign to each separate folds, pastures, and shepherds, that the care being divided amongst many, each may perform his own office more easily and completely. By these arts the estates of the Guaranies daily gained such accessions of sheep as an European will hardly credit.

Something must now be said of the climate of Paraguay. The temperature of the air varies in different places. Those which are nearest to the south are colder. In the Magellanic region, which is included in Paraguay, the cold is generally intense, the neighbouring mountains are constantly covered with snow, the south

winds are extremely violent, and dreadfully agitate that sea, which is dreaded by all sailors. The territory of Buenos-Ayres itself, situated in the 34th degree of lat. is too cold for tobacco, cotton, the sugar-cane, the herb of Paraguay, apes, and various kinds of parrots, to subsist there, though it produces plenty of wheat, as well as citrons, peaches, quinces, pomegranates, figs, &c. if the diligence of the agriculturist answer to the fertility of the soil. I never saw any snow beyond the mountains near the province of Chili. The year is divided into four seasons as in Europe, but in different order:—whilst the Europeans enjoy summer it is winter there; whilst it is spring in Europe, it is autumn with the Paraguayrians. For with them November, December, and January, are summer; February, March, and April, autumn; May, June, and July, winter; August, September, and October, spring. In the month of August the trees bud, the birds build their nests, the swallows return from their places of retirement. In the winter there is no snow and very seldom frost, so that melons and vegetables will grow up, and not be hurt by the asperity of the air. But in the mountains of Taruma, three frosts succeed one after another. The third, which is much severer than the other two, is always followed, about noon the same

day, by a tempest, accompanied with thunder, lightning, and torrents of rain, which causes the herbs, killed by the frosts, to revive, or fresh ones to spring up. The temperature of the air varies according to the wind. The south wind is cold, the north, hot: hence we often had winter and summer in the same day, whenever one wind succeeded to the other. Nor is the difference of winter fixed and certain. For some countries, Brazil for instance, are afflicted with continual rain at that season, whilst others are distressed by long droughts, lasting many months, as is the case with the territory of St. Iago del Estero. Thunder-storms are not peculiar, as in Europe, to the summer season, but are common to every part of the year: nor can it ever be said that this or that month, though a winter one, will be free from thunder, lightning, and hail. The heat of the sun is excessively painful to horses in travelling, but often more endurable to them when resting in the shade, than in Austria during the hottest part of the summer. That the cold in winter is not very intense you may collect from this circumstance, that the Indians of both sexes and of every age are accustomed to endure it, without danger of any bad consequence, with naked feet, uncovered heads, and no other clothing than a thin piece of linen, and

that the animals remain out of doors day and night. I do not deny that the Indians sometimes use cloaks made of otters' skins to defend them against the cold air. The shortest day with the Paraguayrians is in the month of June, the summer solstice in Europe. The sun rises at the sixth hour and fifty-second minute, and sets at the fifth hour and seventh minute. Their longest day is in the month of December, our winter solstice. The sun rises at the fifth hour and seventh minute, and sets at the sixth hour and fifty-second minute. I speak of that part of the sky under which lie the Guarany colonies situated in the 24th, 25th, 26th, 27th, 28th, and 29th degrees of latitude. From which it appears that there is no day in Paraguay so long or so short as in our Germany. The air of so extensive a province is necessarily various, but for the most part extremely healthful, and calculated to induce longevity.

A history may justly be called defective, if it do not slightly touch upon what is most worthy of note in the wild beasts, amphibious animals, birds, fishes, plants, trees, and their fruit. We will begin with quadrupeds. The tiger appears first on the scene.

THE TIGER.

Paraguay abounds in tigers from the number of its cattle, which are the food of these beasts. They are all marked with black spots, but the skin of some is white, that of others yellow. As the African lions far exceed those of Paraguay in size and ferocity, the African tigers yield in like proportion to the Paraguayrians in the size of their bodies. In the estate of St. Ignatius, which belongs to the Cordoban college, we found the skin of a tiger, that had been killed the day before, fastened to the ground with wooden pegs: it measured three ells and two inches in length, which is no smaller than the dimensions of the hide of a full grown ox. But the largest tiger is much slenderer than any ox.

Tigers, whether springing out like cats or in the act of flight, run extremely quick, but not for a long time together; for as they soon tire, an active horseman may overtake and kill them. In the woods they defend themselves amongst the trees and rocky places, and pertinaciously repulse assailants. It is incredible what slaughters they daily commit in the estates. Oxen, sheep, horses, mules, asses, they kill without difficulty, but never eat till putrid. They devour stinking flesh in preference to sweet, as the following facts will clearly prove. Should a Spaniard, an Indian, and a Negro sleep toge-

ther near the same fire and in the same place, the tiger will reject the Spaniard and Indian without hesitation, and rush to devour the Negro; for Negroes' flesh they reckon a dainty, because it is most stinking. Tigers will devour, to the last morsel, horses' carcasses streaming with liquid putrefaction, though living horses be at hand. Both Spaniards and Indians conspire against these destructive beasts. They construct a very large chest, like a mousetrap, composed of immense pieces of wood, and supported upon four wheels, and drag it with four oxen into that place where they have discovered traces of tigers. In the farthest corner of the chest, a very stinking piece of flesh is placed, by way of bait, which is no sooner laid hold of by the tiger, than the door of the chest falls and shuts him in, and he is killed by a musket or a spear put through the interstices of the planks. In the town of the Rosary we spied a tiger not yet full grown, but menacing and formidable to all he met, in a wood, a gun's shot distant from my house. Myself and three armed Spaniards flew to kill him; on seeing us, by flying here and there amongst the trees and brambles, he contrived to get out of sight. Following his footsteps we found him lurking in an aged, very large, and almost hollow tree, which, to deprive the tiger of all egress or means of escape, we strewed about with pieces of wood, making

a hole in the side of it, that the lurking beast might be put to death with arms, which I at last effected without the least danger to myself. You cannot conceive how the tiger leapt up and down in the hollow of the tree after receiving a few wounds. The skin, which was pierced with shot and the sword till it was like a sieve, could be made no use of, though the flesh afforded the Abipones a sumptuous supper. But as tigers are possessed of singular strength, swiftness, and cunning, it is scarcely safe for one person to pursue them in the open plain. I do not deny that a tiger may be sometimes pierced or strangled, by a Spaniard or Indian alone. But a Spaniard or Indian is often torn to pieces by a tiger from the spear's thrust missing, or failing to inflict a mortal blow; for unless the interior of the head, the heart, or the spine of the back be wounded, this powerful beast does not fall, but gets infuriated, and attacks the aggressor with rage proportioned to the pain of the wound.

On this account, whenever any of those beasts are to be destroyed, many men armed with spears unite together; the use of the musket alone is almost always dangerous; for unless the tiger is knocked down by the first ball, he leaps furiously to the place whence the fire proceeded, and tears the man that inflicted the

wound. He, therefore, that does not choose to run the risk of his life, goes accompanied on each side by two spearmen, who pierce the tiger as it advances to attack him, after he has fired his musket. Taught by the danger of others, I found that bullets must not be rashly used against tigers. Travelling with six Mocobios, from the city of Santa Fè to the town of St. Xavier, I passed the night on the banks of the round lake, in the open air, as usual; the earth was our bed, the sky our covering. The fire, our nightly defence against tigers, shone for a while in the midst of us as we slept, but at length grew very low. In the middle of the night a tiger crept towards us. My Indian companions, that they might not appear distrustful of the friendship of the Spaniards, had begun the journey unarmed. Anticipating no danger, I had neglected to load my musket. At my direction, firebrands were dexterously hurled at the approaching tiger. At each throw he leapt back roaring, but resumed courage, and returned again and again, more threatening than before. Meantime I loaded my musket. But as the darkness deprived me of all hope of killing the tiger, and left me only the desire to escape, I loaded my musket with plenty of shot, and fired it off without a ball. The beast, alarmed at the horrid thundering, instantly fled, and we lay down to sleep

again, rejoicing in our success. Next day, at noon, in a narrow path, bounded on one side by a lake, and on the other by a wood, we met two tigers, which would have been caught with a noose by the pursuing Mocobios, had they not fled and hidden themselves in the wood.

Innumerable tigers are yearly caught with leathern thongs by the Spaniards and Indians, on horseback, and are strangled, after being swiftly dragged for some time along the ground. The Pampas wound the tiger's back with a slender arrow, and kill him instantly. At other times, for the same purpose, they use very strong arrows, or three round stones suspended from thongs, which they hurl at the tiger. How great their strength must be you may judge from this, that if they meet two horses in the pastures tied together with a thong to prevent their escaping, they will attack and slay the one, and drag him, along with the other live one, to their den. I should not have believed this, had I not myself witnessed it, when travelling in company with the soldiers of St. Iago. Their cunning is equal to their strength. If the wood and the plain deny them food, they will procure it by fishing in the water. As they are excellent swimmers, they plunge up to their neck in some lake or river, and spout from their mouths the white froth, which, swimming on the surface of the

water, the hungry fishes eagerly devour as food, and are quickly tossed on to the shore by the claws of the tigers. They also catch tortoises, and tear them from their shells by wondrous artifice, in order to devour them. Sometimes a tiger, lurking unseen under the high grass or in a bramble bush, quietly watches a troop of horse passing by, and rushes with impetuosity on the horseman that closes the company. On rainy and stormy nights they creep into human habitations, not in search of prey or food, but to shelter themselves from the rain and from the cold wind.

Though the very shadow of this beast is enough to create alarm, yet those are most to be dreaded which have already tasted human flesh. Tigers of this description have an intense craving after men, and continually lie in wait for them. They will follow a man's footstep for many leagues till they come up with the traveller.

It will be proper in this place to give account of some methods of defence against tigers. If you climb a tree to avoid falling into the clutches of a tiger, he will ascend it also. In this case urine must be your instrument of defence. If you cast this into the eyes of the tiger, when he is threatening you at the foot of the tree, you are safe—the beast will immediately take to flight. In the night a blazing fire

affords great security against tigers. Dogs also are dreaded by them, though these they sometimes cruelly flay and tear to pieces. The Spaniards have mastiffs which are very formidable to tigers. In the town of St. Ferdinand a tiger often stole by night into the sheepfolds, killed the sheep, sucked their blood, and leaving their bodies, carried away their heads. This audacity at length appearing to us no longer endurable, at sun-set twenty Abipones armed themselves with spears to kill the mischievous beast, and placed themselves in ambush. Another, armed with pistols, lay down in the midst of the flock. Though the men were silently concealed in the court-yard close by, yet the tiger, aware of the circumstance, either from the smell or hearing, durst not approach the sheepfold. At length, despairing of his arrival, the watchers, about night-fall, returned to their huts. Scarcely had they turned their backs, when the tiger returned and tore to pieces ten sheep. To search him out, all the Abipones that were at home set off on foot, armed on both sides with spears, ready to strike whenever the beast appeared. At the request of the Indians, I closed the company, armed with a gun and bayonet and some pistols. After diligently exploring the vicinity, as no tiger appeared, we returned home without

effecting our business, and saluted by the hisses of the women. But the very same tiger at sun-set daily approached the town, to tear away part of the carcass of a dead horse, without ever being caught by the Indians who lay in wait for him. The Abipones have continual contests with tigers, and unless the spear misses, are uniformly victorious. Hence an Abipon is very rarely devoured by a tiger, but innumerable tigers are devoured by the Abipones. Their flesh, though horridly ill-savoured even when quite fresh, is eagerly craved after by the equestrian savages, who also drink melted tiger's fat, esteeming it nectar, and even believing it a means of producing valour. They all detest the thought of eating hens, eggs, sheep, fish, and tortoises, imagining that those tender kinds of food engender sloth and languor in their bodies, and cowardice in their minds. On the other hand, they eagerly devour the flesh of the tiger, bull, stag, boar, anta, and tamandua, having an idea that, from continually feeding on these animals, their strength, boldness, and courage are increased. In repeated battles with tigers many persons are wounded by their claws. The scars, after the wounds are healed, occasion excessive pain and burning, which no time nor medicine can ever relieve. The tigers themselves are tormented with the heat of their own

claws, and in order to relieve the pain, they rub them against the tree *seibo*, and leave the mark of their nails in the bark.

The tiger spares no living creature; all it attacks, but with various fortune and success: for horses and mules, unless they save their lives by speedy flight, are generally overcome; asses, when they can gain a place where they may defend their backs, repel the assailant, by going round and round, and kicking very quickly for a long time; but in the open plain they seldom obtain a victory. Cows, trusting to their horns, defend themselves and their calves with the utmost intrepidity. Mares, on the contrary, at the approach of a tiger, desert their foals and take to flight. Antas lie down on their backs, await the advancing foe with expanded arms, and immediately on his assault squeeze him to death, if we may credit the testimony of the natives. Tigers' skins are used by the Abipones for breastplates, for horsecloths, for carpets, and for wrappers. In Spain, every skin is sold for four, and sometimes six German florens. In the hope of gain, a number of Spaniards join together in Paraguay, and go out to hunt tigers. A vast quantity of tigers' skins are yearly sent to Spain. In the city of Sta. Fè, I knew a Spaniard at first indigent, who, from this trade in skins,

within a few years excited the envy of others by his opulence.

To the tiger kind belong two other wild beasts, but smaller, and not so ferocious. One of them is called by the Spaniards *onza*, the other by the Guaranies *mbaracaya*. These, though seldom offensive to other animals, often depopulate a whole henroost by night, but are seldom seen by day.

THE LION.

The Paraguayrian lions seem unworthy of so great a name; for they are quite unlike those of Africa in form, size, and disposition. They never attempt any thing against horses, oxen, and men, and are dreaded only by calves, foals, and sheep. The Paraguayrian lions suit well with the old Spanish saying, *No es tan bravo el leon, como se pinta*, the lion is not so fierce as his picture. You can scarce distinguish their flesh from veal, so that the Spaniards and Indians devour it with avidity. Their skin is tawny and spotted with white. Their head is large and round, their eyes sparkling, and nose flat. Their whiskers are composed of long hard hairs, like bristles, for I have handled them myself; but hear on what occasion. The guards of the estates, both Spaniards and Indians, had a custom of preserving the heads of the lions and

tigers which they slew, fastened with stakes to the folds of the cattle, as testimonies of their vigilance and courage, in the same manner as the heads and hands of criminals are seen fixed to a pole in the place appointed for their punishment. In a certain estate I got up upon the hedges, examined the heads of the lions and tigers, of which there was an immense number, observed their eyes, ears, and teeth, and tore some hair out of the whiskers of the tigers, which resembled wire, were thick at the root, and endued with a kind of elastic property. I cannot understand why the Abipones do not rear the whelps of lions, as they reckon tigers' whelps a dainty, though they are never procured without danger. Before they are full grown they give proofs of their native ferocity, and with their little tender claws and teeth fly upon all they meet, especially in the heat of the sun. One man deprived a tiger's whelp of its teeth and claws, to prevent it from doing any mischief, but though destitute of its arms, it used to rush upon children and calves, and would certainly have crushed and strangled them, had they not been instantly rescued. That the danger might not increase as he grew up, he was forced to be shot.

THE WILD CAT.

In most of the woods you may see wild cats,

differing from the domestic ones in our country in no other respect except that the extremity of the tail is flatter and more compressed, and that they are superior in size. They are also of various colours. The Indians eat them roasted, but being extremely swift and shy, they are not killed without difficulty. We had a young cat in the town of Conception, born of a tame mother and a wild father, than which I never saw a larger or handsomer, or one more ferocious and fugitive.

THE ANTA, OR THE GREAT BEAST.

The more secluded woods towards the north are the haunts of this animal, which the Spaniards call the Anta, or *La gran bestia.* In size it resembles a full grown ass: in shape, if you except its eyes, head, and feet, a pig. It has rather short ears, inclining towards the forehead, very sharp teeth and lips, like those of a calf, the upper part of which somewhat resembles a proboscis, and is thrust forward by the animal when he is angry. The fore feet are cloven into two hollow nails, the hind feet into three. A smooth unhairy appendage supplies the place of a tail. The skin is of a tawny colour and extremely thick, on which account it is dried in the air by the Spaniards and Abipones, and used for a breast-plate to ward off the blows of swords and

arrows, but is penetrable to shot and to spears. This beast flies the sight of man, though possessed of such extraordinary strength as, when caught with a rope, to drag along with him in his flight both horse and rider. It generally sleeps in the day-time, and by night, wandering up and down the recesses of the woods, feeds upon herbs; it frequently betrays itself by the rustling noise it makes in breaking the branches of shrubs and trees as it walks about the woods. The Indians who inhabit the woods lay traps, made of stakes, to catch the antas, or concealing themselves in some thicket, imitate the sound of their voices, and pierce the beasts on their arrival with arrows; for their flesh, either fresh or hardened by the air, is continually eaten by the savages, though its toughness renders it rather unpalatable. In the stomach of the anta lies a pouch, which is often found to contain a number of bezoar stones, scarce bigger than a hazle-nut, not oblong nor oval, but polygonous, and of the colour of ashes or lead. These are thought by physicians superior to the bezoar stones supplied by other beasts, and more efficacious as medicine. Arapotiyu, the young Indian whom I brought from the woods of Mbaeverà, which the savages call the country of the antas, gave me a heap of these bezoar stones: —"Take, father," said he, "these most salutary little stones,

which I have collected from the antas I have killed." On my inquiring what virtue they attributed to them, and how they were used in the woods, he replied—" Whenever we are seized with a malignant heat, we rub our limbs with these antas' stones, after warming them at the fire, and receive immediate relief." This use of the bezoar stone I submit to the judgment of physicians, for it must be confessed I never made trial of its virtues. The nails of antas are much esteemed by the Spaniards, as remedies for ill-health, and worn by them as amulets, to defend them from noxious airs: they are said to be sold in the druggists' shops in Europe, for various medicinal purposes, especially for persons afflicted with epilepsy, small-pox, and measles, as is related by Woytz in his Medico-physical Thesaurus, where he affirms that antas are often afflicted with epilepsy or the falling-sickness, and that, to relieve the pain, they rub the left ear with the nail of the fore foot. The truth of the fact must be looked to by those who have affirmed it, and have hazarded the assertion that the anta is called by the Germans *elendthier*, the miserable beast, because it is subject to epilepsy. But in reality it was called by the old Germans *elck*, by the Greeks ἄλκη, and by the Latins *alx* or *alce*. As it appears from all writers, that elks are horned in the

northern countries of Europe, and as I myself saw, that those in Paraguay have no horns, I began to doubt whether they were not a different animal altogether, and only bore the same name on account of some similitude.

I do not agree with those who call elks *equicervi*, mongrel creatures born of a stag and a mare. This cannot be imagined for a moment of the Paraguayrian antas, which inhabit the roughest and most rugged forests, not only unknown but almost inaccessible both to horses and stags. The antas choose plains full one hundred leagues distant, where they can never meet with either of those animals. However this may be, I advise giving credit to those who, in the present age, have written more fully on natural history from authority.

THE HUANACO.

This animal, which the Spaniards call Guanáco, and the Abipones Hakahátak, as it has no name in Latin, may be called ἐλαφοκαμηλον, a cameleopard, as the ostrich is called a camel. For whilst it resembles a stag in other particulars, its head, neck, the bunch on its back, the fissure of the upper lip, and the tail a span long, are like those of a camel. Its feet are cloven, and its skin shaggy, and for the most part of a reddish colour. The hair of this beast serves to

make hats with. Its flesh is eaten both by Spaniards and Indians. Its swiftness stands it in the stead of arms. It never attempts to kick or bite, but when offended by any one, spits at him in a rage; this saliva is commonly said first to create a red pustule, and afterwards to bring on the mange. Like goats, these animals inhabit rocks and high mountains, but come down in flocks, at pleasure, for the sake of the pasture in the plains below the mountains; mean time one of the males occupies a high place, whence, like a watchman from a tower, he sees if any danger is near, and surveys every part of the neighbourhood. The whole flock hurries away upon any alarm, the females going before, and the males closing the company. This is seldom a panic terror, for the huanacos, whilst occupying the pastures in the plain, are often caught by the Spanish horsemen; but very swift horses are necessary for this business, as they run extremely quick. I have often seen flocks of these animals, when travelling in Tucuman, on the Cordoban mountains. Hearing the sound of approaching horses, they crowd to the highest summits of the rocks, whence, ranged like soldiers in a long file, they look down upon the horses as they pass underneath, neigh for some time in a manner strongly resembling human laughter, and presently,

struck with sudden terror, for they are extremely timorous, scour off in all directions. This spectacle frequently amused and delighted us Europeans. Huanacos, though very wild and shy, may be easily tamed in the towns, when young. Besides the skin and flesh of the huanacos, the bezoar stone, which is often found in their insides; is of value. It sometimes weighs more than a pound, is always oval, scarce smaller than a hen's egg, and painted, like marble, with most exquisite colours. Most probably it derives this medicinal property from the animal's feeding upon wholesome herbs, which grow in the mountains: its virtues, however, are thought little of by the physicians of these times, who despise old prescriptions.

THE PERUVIAN SHEEP LLAMÁS.

Peru, the neighbour of Paraguay, produces wild animals, in which the bezoar of various colours, forms, and sizes, is found: namely, the native sheep, which the Indians call Llamás, the Spaniards Carneros de la Tierra, and which are used, like beasts of burden, for carrying weights, not exceeding one hundred pounds.

THE VICUÑA.

This country likewise produces Vicuñas, ani-

mals equal in size to a goat in our country, but not horned, and clothed with wool of a darkish yellow colour, softer than silk, and much esteemed by Europeans. A garment made of this wool cools the body when the sun is oppressively hot. It is said to cure pains in the kidneys, and to assuage the torture of the gout. The flesh of the vicuña, though unsavoury to the palate, is eaten by the Indians; it is also used as medicine. A man who had got a disorder in his eyes, from walking for a long time amidst snow in Peru, was presently relieved of the pain by a piece of vicuña's flesh, applied to the part affected, by an Indian woman.

THE PACO, MACOMORO, & TARÙGA.

Peru also boasts of pacos, macomoros, and tarùgas, which are almost of the same use and appearance as the former, and in like manner produce the bezoar stone.

THE TAMANDUA, OR ANT-EATER.

The tamandua obtains its name from the ants upon which it feeds. But it does not eat every kind of ant, but only those which the Guaranies call *cupis*, and their eggs. When these are not to be had, it takes up with little worms, winged insects, honey, and meat cut into very small particles. In bulk it is

equal to a very large pig, but superior in length and height. Its head does not correspond to the size of its body. A very small fissure, which is seen in its long snout, serves it for a mouth, under which is concealed a blackish, smooth tongue, slenderer than the goose's quill I am writing with, but twenty-five inches long. This he dips into a hill of ants, scraped together with his nails, and when covered with those insects, or their little eggs, draws back again into his mouth, and swallows them instantly. This animal has small black eyes, middle-sized, and almost round ears, and a blackish skin, interspersed here and there with white, and for the most part hairy. From the extremity of the fore-feet project four curved nails, of which the two middle are very strong, and three inches in length; they are quite necessary arms to the tamandua, for with them he digs up, and removes the turf under which the ants' nests lie. The hind feet have five fingers, furnished with as many nails, and in walking make the same footsteps as a boy. The tail, which is covered with stiff bristles, longer than the hairs in a horse's mane, is as long as his whole body, and so wide that, bent towards the neck, with the hairs expanded on each side like a fan, or fly-flap, it covers his whole body when he sleeps, and defends him not only

against cold, but even against rain. This beast is not able to keep running for any length of time, and may be easily caught by a person on horseback, or even on foot. Its flesh is eaten by the Indians, but not reckoned a dainty. When young it is very soon tamed in the colonies of the Indians, but seldom brought up by them, because it must be chiefly fed upon ants, which are very troublesome to procure.

THE WILD BOAR.

Four different species of boars abound in Paraguay. The most remarkable are those which have upon their backs a spungy, glandulous little piece of flesh, swelled with a white liquor resembling milk, and scented like musk. This boss is immediately amputated after the animal's death, before the intolerable odour of musk has infected the flesh, and rendered it unfit for use. In woods, near marshes, and marshy fields, wander herds of boars, which are killed, either with a stake, or with arrows, by the Indians. Herds of boars sometimes rushed into the colony of St. Ferdinand, perhaps from the hope of finding food there, perhaps from some other motive. But the Abipones, assembling together, killed a great number of them, and feasted sumptuously upon their flesh for some days. I was told that boars entered the

towns of the Uruguay in the same manner. The Abiponian women make themselves travelling dresses of the skins of this animal, and its bristles are collected into small bundles, and used as combs.

VARIOUS KINDS OF LITTLE FOXES.

THE ZORRINO.

There are three sorts of foxes here, different from those of our country. The Abipones call the larger ones Kaalk, the lesser Licheran, and the least Lichera, which last is named Zorrino by the Spaniards, and by the French Canadians Bête Puante, the stinking beast, or Enfant du Diable, child of the devil; appellations which it justly deserves. This animal, which is equal in size to a small rabbit, of a chesnut colour, and marked on each side by two white lines, though it pleases the eyes by its elegant form, offends the nostrils by its excessive stink. It may be commended for beauty, but not for politeness; for at every passer-by it squirts, with certain aim, a liquor so pestilent, that dogs, if sprinkled with it, will howl dreadfully, and roll themselves for some time on the ground, as if scalded with boiling water. If it touch the eyes, blindness is the certain consequence. If a woollen or linen garment, a stick, or any

thing else, be sprinkled with it, no farther use can be made of the article on account of the stink, which no art will ever take away. If one of these animals shed his urine in the open plain, the stench is carried by the wind the space of a league. That white liquor shines in the night like phosphorus, and wherever it passes, looks like a ray of fire. If a skunk creep into a house, and scatter any of that terrible liquor, the inhabitants, one and all, rush out, as if the house was on fire, and fly into the street or open plain, to breathe freely, that they may not be stifled with the stench. Therefore, although this animal is very little and weak, it is dreaded extremely by tigers, mastiffs, and all mortals. Its unequalled stink is its means of defence. Whoever desires to possess its most beautiful skin, in order to catch it, without injury to himself, must take it by the tail, and hold it with its head towards the ground; for, by this means, it loses the use of its pestiferous syringe, and cannot squirt out that horrible liquid. Some assert that the fat in the kidneys of the skunk is either the cause, or the receptacle of the stink, and that if this be taken away, the flesh may be eaten, and is not of an unpleasant savour: I envy no one such a dainty.

Many have written of the skunk, but gene-

rally from the accounts of others: I, alas! from my own experience. I feel both shame and grief in refreshing the sad remembrance of my disaster; but will, nevertheless, relate it, to show you my candour. When, with some fifty companions, we journeyed from the port of Buenos-Ayres, where we first landed, through an immense plain of an hundred and forty leagues, to Cordoba, we were all conveyed in waggons, drawn by four oxen; for a waggon in those deserts serves both for house and bed. Reclining, day and night, upon a mattrass, we pursued our journey according to the season, the roads, and the weather. The jolting of this rude vehicle creates nausea, and fatigues the whole frame, so that quitting it at evening, to enjoy the fresh air, was quite a relief. As I was walking with two Spaniards, I spied a skunk gently approaching us: "Look," cried I, "what a beautiful animal is that!" We trusted too much to external appearance. Not one of us perceived what a pest was concealed under this elegant skin. Hastening our steps we all emulously ran to catch the animal, and my ill stars directed that I should outstrip both the Spaniards. The cunning skunk, spying me near him, feigned submission, stood still, and, as it were, offered himself my captive. Distrusting the blandishments of an animal that was unknown to me,

I gently touched it with a stick. In a moment it lifted up its leg, and discharged at me that Stygian pest. It sprinkled my left cheek all over, and then victorious, took to flight immediately. That my eyes were spared may be accounted a blessing. I stood thunderstruck; become, in an instant, intolerable to myself; for the horrid stench had diffused itself from my cheek into every part of my body, to my very inner garments; and spreading in a moment through the plain, far and wide, announced what had happened to my companions. Some on foot, some on horseback, they all hastened to look at me, amidst peals of laughter; but, smelling me from a distance, returned a long way back, with greater speed than they had come. Like an excommunicated person, I was shunned by all, and was forbidden to enter the very tent where I used to sup with the rest. I, therefore, betook myself to my own waggon. On asking the Spanish driver if he smelt any thing amiss, he replied that he had been deprived of the power of smell for four years. "Oh! fortunate circumstance!" cried I, for if the driver had been in possession of this faculty, I should have been banished from my own waggon also. Throwing off all my clothes, I washed, wiped, and rubbed my face over and over again. But this was washing the black-

amoor white. That night I wished I could have been separated from my body, so entirely had that liquid exhalation penetrated my very fibres, especially my cheek, which it burnt like fire. My clothes, all of which I had entirely thrown off, though daily exposed to wind, rain, sun, and dust, for more than a month, on the top of the waggon, always retained the vile scent, and could be made no possible use of. Had I a hundred tongues I should think them all insufficient to convey an adequate idea of the stench of this ill-scented beast. Whether it be urine which it discharges, or any other liquid, I am at a loss to determine. This is indubitable,—that if Theophrastus, Paracelsus, and any other chemist, had conspired together, in all their furnaces and shops, and with all their arts, they could never have composed a stink more intolerable than that which the skunk exhales by nature. Spirit of hartshorn, or any more powerful odour, if there be such, will be called aromatic scents, frankincense, balm of Gilead, and the most fragrant carnations and roses, by him that has once smelt the skunk. Europe may be congratulated upon her good fortune in being unacquainted with this cursed beast.

THE BISCACHA.

Let this fetid animal be succeeded by the

ridiculous biscacha, which closely resembles a hare, has a tail like that of a fox, and is marked with black and white spots. Its hair is exceedingly soft. In the plains, particularly in the more elevated situations, these animals dig themselves burrows so artfully, that no part of them is exposed to the rain. They are divided into separate apartments, as several families usually inhabit the same place. On the surface of the earth many doors are opened into the cave, at which crowds of them sit at sunset, and carefully listen if any one be approaching; but if all is quiet they go out to pasture on moonlight nights, and make deplorable havoc in the neighbouring plains; for they are extremely fond of wheat and maize, and if either of these is to be had, will not feed on grass. At the doors of their burrows they heap up dry bones, bits of wood, and any other rubbish they can light upon, but for what purpose, no one hitherto has been able even to conjecture. The Spanish rustics sometimes amuse themselves with hunting these animals. They pour many pitchers of water into their subterranean dwellings, so that, to avoid drowning, the creatures leap out into the plain, and, no opportunity of escape being allowed them, are killed with stakes. Their flesh, unless they be very old, is not despised, even by the Spaniards.

THE HARE.

Hares, differing from those of Europe, in size alone, do exist in Paraguay; but I imagine there must be very few, because, though I have often traversed the whole province, and have lived chiefly amongst the Indians, who spare no kinds of animals, I never saw but one. In Tucuman, where it looks towards Peru, I understand that hares are not so scarce.

VARIOUS KINDS OF RABBITS.

As rabbits are extremely numerous in every part of this country, there is likewise great variety amongst them. Some, of various colours, like those of our country, live under ground. Others, which hide themselves under shrubs and bushes, are less than hares, larger than our rabbits, and of a bay, or rather a chesnut colour. Their flesh, which is extremely well tasted, may be seen at the tables even of the more wealthy. Several pairs of these rabbits are said to have been brought from Spain by some person who, in travelling through Paraguay into Peru, took rabbits of each sex out of their coop, and set them loose on the plain to feed, at which time some of them escaped and ran away. Their posterity is, at this day, extremely numerous in Tucuman, especially in the land of

St. Iago. Other kinds of rabbits, scarce bigger than dormice, conceal themselves sometimes in the hedges of fields, sometimes in holes under ground, and, being innumerable, are extremely pernicious to wheat. The Abipones, who undertake most of their journeys without provisions, when they wish to dine or sup, set fire to the tall dry grass in the plain, in order to kill and roast the animals concealed underneath it, which leap out for fear of the fire. Were tigers, deer, stags, and emus, not to be had, there would never be a deficiency of rabbits, a hundred of which they easily take, and hang upon a string, after a chase of this kind. I was told by Barreda, the old General of the St. Iagans, that in hasty marches in search of the enemy, when there was no time for hunting, rabbits, dried in the air, served the Abipones for victuals.

THE STAG.

The shores of the Parana and Paraguay, and the larger islands of these rivers, abound in stags, which, in no respect, differ from those of Europe. Not one is to be seen in any other part of Paraguay. The Abipones pursue the stags on swift horses, and laying hold of their horns, kill them either with a knife or a spear; they also pierce them with thick arrows, when

hunting in a wood impervious to horses. Formerly, before the savages were acquainted with iron, they prefixed a stag's horn to their spears, instead of an iron point, and this weapon inflicted very deep wounds. Whilst I dwelt amongst them, some of the elder Abipones still used spears pointed with stags' horn, and were the more dreaded on that account. Stags' skins, which are used for various purposes, the Spaniards soften and polish with the melted fat of mares. They also entertain an idea that the smallest piece of stag's skin, worn close to the body, is a powerful preservative against the bites of serpents, as it is well known that stags and deer have frequent conflicts with these animals.

ROEBUCKS.

On entering the plain, wherever you turn your eyes you will see nothing but roebucks, exactly like European ones. Those which inhabit the plains are of a chesnut colour, but brighter; those which live in the woods, of a darker chesnut, but both are marked with white spots. When young they are easily tamed at home. I once nourished a little fawn, only a few days old, brought me by an Indian, on cow's milk, and reared it in my own apartment. When grown older, it went daily into the plain

to pasture along with the cows, which are milked in the court-yard, but returned to my room of its own accord. When he found it shut he signified his arrival by knocking against the door with his feet, often in the middle of the night. He followed me, whether walking or riding, like a dog. He beheld a crowd of dogs running after him without alarm, and often put them to flight by stamping on the ground with his feet. By tinkling a collar of bells which I placed round his neck, he frightened all the dogs, and deceived them into thinking him some strange and formidable animal. He fed upon meat, bread, roots, and grass, but a sheet of paper was quite a treat to him, and sweeter than honey to his taste. The collar, which many months before I had fitted to his neck, beginning to squeeze him as he grew older, I endeavoured to loosen it; when the little animal, imagining that I did it with the intent of causing his death, and believing me to be his enemy, took to flight, and wandered up and down the more distant plains, without revisiting me for a month. He was often seen by the Indians. At length I directed my attention towards recalling and reconciling him. Allured by a sheet of paper, which I showed him from a distance, he approached me, though with a trembling foot, and being presented at intervals with fresh

sheets of paper, followed me to the house, unmindful of his terror and offence, and ever after remained, as long as he lived, with the utmost fidelity in my house. He would often fight with mules for half an hour together, affording a spectacle worthy to be seen and applauded by the assembled Indians; for resting on his fore-feet, he kicked the head of the mule every now and then with his hinder ones, and whilst his antagonist with bites and kicks endeavoured to render like for like, the fawn, by leaping backwards and forwards with incredible celerity, eluded the threats and anger of the enraged beast. After obtaining so many victories, to the astonishment and applause of the whole town, engaging in the plain with an untamed mule, his back was broken by the kicks of his adversary, which occasioned his death, at two years of age, when, being a male, he had very large horns. You will scarce believe how we grieved for his death. I still have in my possession a music-book bound with his skin.

THE YKIPARÀ.

The ykiparà, a species of mole lurking in holes under ground, makes a horrid noise, like the sound of a great drum beat at a distance, which is scarce heard without alarm by strangers. I cannot describe the appearance of this

little animal, never having seen, though frequently heard it. I imagine that its voice must sound the louder from being re-echoed by the hollow corners and windings of the earth.

DIFFERENT KINDS OF APES.

Were I individually to describe the names, forms, and properties of all the apes which inhabit the North of Paraguay, this subject alone would fill a volume. Those called caraya are the most numerous and the ugliest species. Their hair is tawny, they are full of melancholy, always querulous, always morose, always snappish. As they howl incessantly day and night no one chooses to take them home and tame them. They sit by crowds on trees, and wander about in search of food. When they howl with most pertinacity it is a sign of rain or storms; the sound they utter resembles the creaking of waggons with ungreased wheels, and as hundreds howl in concert, may be heard many leagues off. They are of a middle size.

THE CÀYÍ.

The little apes called càyí are scarce a span long, when full grown; they are merry, playful, and, if tamed young, extremely docile. But they can seldom be allowed to walk up and down the house at large, for, wanting to touch

and taste every thing, they throw down inkstands and other vessels, spill liquors, tear books, and break every thing made of glass. They put their fingers into boxes, lamps, and jugs, smell them, and dirt the table and people's clothes. They steal every thing fit to eat that they can lay hands on. They are, therefore, tied with a long slender cord in such a manner that they may be able to go up and down. We had a little ape of this kind in the town of St. Joachim, which readily unclasped the men's spurs when they returned from riding. I have seen others take a journey seated on the back of a dog, and by mimicking the actions of men, like buffoons, excite both anger and ridicule. It is, therefore, no wonder that apes of this kind should be prized both by Indians and Europeans, and bought at a high price. Potatoes are their daily fare, but they also feed sometimes on flesh, bread, or any thing made of flour. Great care must be taken not to give them too large a portion, otherwise they will eat till they burst. In the woods, when quite young, they are carried about on the backs of their mothers, round whose necks they put their arms, like infants, and in this manner are borne along the boughs of trees, wherever there is any chance of finding food. An Indian, therefore, who wants a live ape, kills the mother with an

arrow, and the little one never suffers itself to be torn from her without howling. I will tell you something still more surprizing, and which seems almost incredible. The Guaranies sometimes remain in the woods four days together, employed in hunting wild beasts. Having killed a number of apes, they consume part of them on the journey, and roasting the rest to prevent their growing putrid from the heat of the sun, carry them to the town to be eaten at home. The little apes, which are kept alive for diversion, know their mothers when roasted and blacker than a coal, and adhere so tenaciously to their shoulders, that their running away is not the least to be apprehended. Who does not admire the filial affection of these animals, which, though imitators of mankind in other respects, may certainly be their instructors in this?

BARBUDOS.

The Spanish Paraguayrians employed in collecting the herb of Paraguay in the thick northern woods, often see very large and melancholy apes, with extremely long beards, on account of which circumstance they have given them a ridiculous name which I prudently forbear to mention. They love dark recesses, flying mankind and the light, but are universally dreaded, on account of the arms they make use

of: for at every passer-by they throw some of their stinking dung, which is always ready. But in comparison to that of the skunk, this stink may be accounted rose and saffron. No one has hitherto ever thought of catching and taming them.

THE CARUGUÀ.

In the more secret recesses of the woods wander apes, which the Guaranies call caruguà, and the Spaniards *diablos del monte*, devils of the woods. They are hairy, and taller than other apes; in walking they generally stand on their hind-feet. Their footsteps are like those of a boy of fourteen years old. They love solitude, and do not lie in wait for man, but if they spy one near them in the narrow parts of the forests, they tear him to pieces with the utmost ferocity. I knew of a Guarany belonging to the new colony of St. Stanislaus, who died of a dreadful wound he received from a caruguà. An Indian belonging to the same colony killed one of these apes in a distant wood. Fearing that the trouble of a long journey, under a burning sun, would prove insufferable, he left the carcass of the beast, but cut off his horrid nails, more formidable than any dagger, and showed them to Father Pietro Paulo Danesi, a Roman, to whom the care of the town was at

that time entrusted; they were carried about the other Guarany towns, that all who beheld might thereby judge of the beast to whom they belonged, and learn to know and dread the terrific arms of the caruguà, whenever they had to traverse rugged forests. I was once very near becoming the prey of one of these ferocious beasts. Passing the night in the woods of Mbaeverà, whilst the Indians and my companion Paschali Vilalba were sound asleep, I heard the noise of boughs breaking, together with a little singing sound resembling a human voice. As the voice and the noise approached nearer to me, and I was at a great distance from the fire of the Indians, I cried out and inquired of my comrades, who were at length awakened by my clamour, what bird or beast uttered those sounds? After listening awhile, they all exclaimed that the caruguà, the devil of the woods, was approaching. A number of them ran to encounter him, armed with spears and firebrands. The beast, alarmed at their approach, hastened back; and thus delivered from peril, I breathed once again.

THE QUATÌ.

The quatì appears to be of a mongrel breed, for its snout is like that of a barrow-pig, its head like that of a fox, while the rest of its

body resembles a middle-sized ape, with a yellow skin, and a tail longer than all the rest of its body, divided into little rings of various colours. Like apes, these animals leap up and down the boughs of trees, on the fruit of which they subsist, though you sometimes meet a numerous herd of them jumping about upon the ground. Even when full grown, they are completely tamed by the Indians, within a few days, but are always destructive to hens, and their eggs, which they delight in.

THE AY.

The last of the different tribes of apes is an animal which, from the slothfulness of its nature, and the slowness of its motions, is called by the Guaranies, ay, and by the Spaniards, *la pereza*, the sloth. It is about the size of a fox, and has a small head, a narrow face, smooth nose, little black eyes, and long hair, of the colour of ashes, which spreads over its neck like a mane. It has a dusky streak in the middle of its back, long nails, bent backwards on each foot, a wide mouth, a thick tail, weak teeth, no ears; its appearance, in short, is ridiculous and disagreeable in every point of view. It lives upon the tops of trees, and feeds upon their leaves, and sometimes upon the smaller kinds of ants. It never gets up upon its feet,

nor is it ever seen to drink, perhaps content with dew. Slower than any tortoise, it so dreads the slightest motion, that it spends a whole day in creeping up or down a tree. It detests the least drop of rain. Every now and then it pronounces the letter I, like a person groaning. It has a remarkably firm skin; but its flesh is nauseated even by the Indians. From what I have said, you may perceive that this most slothful animal is extremely dissimilar to apes, which spend the whole day in running, leaping, and playing, as if impatient of the shortest respite. The Indians, in travelling, take great delight in the flesh of apes, which, in various countries of America, is the chief and most esteemed food of the Indians. Moreover, many of the Americans have believed apes to possess the power of speech, and to feign themselves dumb, that they may not be obliged to labour by the Spaniards. Whenever an ape is wounded by a bullet, he puts his hand to the wound, as if to prevent his life from being shed with his blood; and when the body is quite lifeless, stiff, and cold, the hand remains in the same situation. I have found, from experience, that their teeth are hurtful and dangerous; for my companion, after being bitten by a mad she ape, was seized with an erysipelas, which spread from the arm to the head, induced a great heat and swelling,

and caused terrible, and almost mortal agonies. In European towns I have seen many apes which are not found in any part of Paraguay; for in various countries there is a great variety of apes; their names are also various on account of the diversity of tongues.

THE ARMADILLO, OR TATÙ.

This little animal, which is scarce larger than a common tortoise, is called by the Spaniards armadillo. Its whole body is armed with horny scales, elegantly varied with red and white. Its head, which resembles that of a young pig, it discovers in walking, but on the approach of danger entirely conceals under this coat of mail. It has rather a long neck. Its scales are clothed here and there with white hairs, especially under the belly. The feet are, like those of a tortoise, with five unequal fingers, armed with very sharp nails with which it digs holes under ground to hide itself in, or clings so firmly to the surface of the earth that the strongest man can hardly make it loosen its hold. It has a long scaly tail, of which, prefixed to a reed, the Abipones make military trumpets. Its little ears are destitute both of hairs and scales. It is furnished with two joints near the neck, so that it can bend its throat here and there. It runs very fast, and makes many doubles to

escape the pursuit of dogs and men. It feeds upon herbs and roots, drinks plentifully and grows very fat. Dogs discover its subterranean retreats by the scent. This animal does not lay eggs, like a tortoise, but brings forth a numerous living progeny. Paraguay produces three species of armadillos, all different in form, size and name. To the first kind belong armadillos full two spans long, and larger than a barrow-pig, with very long nails, and some with yellow, others with red hairs. The scales of the red ones, half burnt and pulverized, are very efficacious in healing horses' backs, which are either ulcerated, or stripped of their hair. These larger armadillos, on account of their feeding on the carcasses of mules and horses, are loathed by most people; but their great shells, or coats of mail, are used by the lower order of Spaniards for dishes and plates. Armadillos of the second species, which are much smaller than the others, abstain from carcasses, and yield flesh and fat of a very pleasant savour. The smallest of the three kinds roll themselves up at will, like a hedgehog. Such is the strength of their globose coat of mail, that no force is sufficient to make it expand, except you pour water with violence upon it; for when wetted they open themselves voluntarily. Their flesh is very white, full of excellent gravy, and even by an European

would be esteemed superior to capon, pheasant, or chicken. Their fat is also used for medicinal purposes. The plains of Paraguay swarm with these mailed animals.

So far concerning the wild quadrupeds indigenous to Paraguay. Let us now proceed to amphibious animals.

THE CROCODILE, OR CAYMAN.

At the head of the amphibious animals stands the crocodile, which exceeds all the rest in the slowness of its motions, and the size of its body. The young creature, when it breaks its shell, resembles a small lizard, such as is commonly seen in European gardens, scarce more than half a span in length. In the course of years it grows by degrees to an enormous size. Crocodiles ten feet long are very common in Paraguay. When a two years' drought had exhausted many of the lakes and rivers in Paraguay, among other aquatic beasts we found numbers of crocodiles roaming about the plain, which died of thirst from being unable to get a sufficiency of water. I am of opinion that most crocodiles reach to extreme old age from the advantage of a singular nature, by which they are so effectually fortified, that it is exceedingly difficult to kill them. I will give you a description of this animal. It has a large, flat head, a very wide mouth, armed

on each side with extremely sharp, but unequal teeth, and large, round grey eyes, with a black pupil. It has no tongue, but the place of one is supplied by a little immoveable membrane. Its feet, which are furnished like birds' claws with four fingers, and nails, it uses, sometimes in walking slowly on the shore, sometimes in swimming. Its body, which resembles a huge trunk, terminates in a long tail, like the point of a weapon, at the extremity of which lies a small black ball, closed on every side, the distinguishing mark of the female sex, for the males are not furnished with this ball. Its rough skin, covered with very hard scales, which are elegantly variegated with black and white, like shells, forms a mail which renders its head, back and tail impenetrable to all weapons. Softer scales adorn rather than arm its belly, sides and feet, where circular or square figures, distinguished at intervals by a colour partly yellow, partly dusky, project, like shells, from the surface of the skin. The tail is composed of blackish rings, and a little denticulated fin which it moves in swimming. The skin of the neck is softer, and very easily wounded. Crocodiles on being attacked by tigers, kill them by a stroke of their tail. They are themselves killed if their neck or belly, both which are covered with softer skin, is wounded by the

horns or claws of beasts, by a bullet, a spear, or an arrow; on these occasions they take to swimming, but the Indians generally swim after them, and bring them back to shore. During a pretty violent south wind crocodiles are rendered torpid by the cold at night, from being immersed in pools; but when the sun is risen, they lie, like logs of wood, on the sunny shore to warm themselves, and their limbs being stiffened, and their senses almost gone, are pierced with spears by the Abipones, without danger or trouble. Leaving their bodies, they carry away nothing but the teeth, and the little bones of the spine, which, being as hard as iron, as sharp as awls, and at the same time elastic, are used by them for the purpose of pricking their limbs, at drinking parties. Crocodiles' teeth, which are thought by the Indians extremely efficacious in curing or preventing the bites of serpents, they wear themselves, or sell to the Spaniards. The flesh of crocodiles is tender, and so white that it can hardly be distinguished from that of sturgeon. Many American nations, especially those which inhabit the islands of the Orinoco, and others, are said to feed on it. But in Paraguay, excepting the Payaguas, who live near rivers, scarce any other nation eats them, because that country abounds in cattle, and wild animals, as well as in vegetables and fruits.

But I think that no European would dislike the flesh of the crocodile, unless it were on account of the musk which it has both in its jaws and testicles. Provident priests hang up a small particle of the glans, to which that musk adheres, wrapped in a piece of gold, or silk stuff, in the sacred coffer of the great altar, where the Eucharist is kept, in order to keep off worms, which, in so moist and hot a climate, are otherwise bred in the sacred wafer.

When you hear it said that crocodiles abound in venom, pray account it an old wife's fable; for it is very certain that they are eaten by the Indians, and would be eagerly sought by all Europeans also, were it not for their musk. Crocodiles' teeth grow very deep in the head, are hollow at the root, but where they terminate in a point, extremely solid, and capable of tearing the hardest substance. It is a terrible circumstance that whatever this beast gets within its teeth it never lets loose of. In the new kingdom of Granada, if a crocodile catches hold of the arm of a swimming Indian with his jaws, those who come to his assistance immediately cut it off, to preserve the rest of the body, as the man would otherwise lose his life. I will now describe to you their manner of breeding. The females, almost every day, lay about thirty eggs, cylinder-shaped, and as large as

those of ducks; these eggs are buried under the sand, and when heated by the sun, bring forth creatures like our lizards. As crocodiles have short feet, and sweep the ground with their vast bellies, they crush a number of eggs whenever they move: for if Providence had not ordered it thus, there would be no room left either for beasts or fishes in America. Crocodiles' eggs are in high esteem amongst the Indians. In the town of Concepcion two crocodiles, a male and a female, newly hatched, were brought by an Abipon to my companion, at whose request I undertook the care of rearing them. To prevent them from escaping, I shut them both up in a very wide and deep wooden mortar, frequently poured fresh water on them, and threw in mud, little fishes, and very small pieces of meat for them to feed upon. This was their habitation, this their food, during seven months. I sometimes took them out of the water, and allowed them to walk up and down the court-yard of the house. The Abipones were delighted to see the little creatures playing on the grass, or striving together with gaping mouths and erected bodies. I had a young dog, which, as was natural to his age, was extremely playful. He imprudently rushed barking upon the crocodiles, when one of them laid hold of his nostrils with its very sharp

teeth. Unable by any means to get rid of this disagreeable appendage, he at length came to me and implored my assistance, when by the hands of the by-standing Abipones, who were laughing heartily at the adventure, the pertinacious crocodile was torn from his nose. It was evident that these beasts were extremely quick of hearing, for they heard the slightest noises, such as would escape human ears—perceived thunder from a cloud at a great distance below the horizon, and acquainted me with the circumstance by repeatedly murmuring ù ù ù ù. At seven months of age, when scarce a span long, they were killed by the cold, in a journey of one and twenty days, taken with the Spanish soldiers, to change the situation of the colony. A sharp frost, for it was the winter season, killed these pupils of mine. Had they enjoyed their natural liberty and food, I have no doubt they would have grown more in so many months.

Much has been written concerning the ferocity of crocodiles towards mankind. I contradict no one. But it would be wronging the Paraguayrian crocodiles to complain of them, for during the two and twenty years of my residence in that country, I never heard of a single creature's being killed or hurt by a crocodile. Almost all the Abipones, men, women,

boys and girls, daily cooled themselves during the heat of the sun, by bathing in rivers, pools, streams and lakes, all which are frequented by crocodiles; yet no one ever received any injury from these animals, no one suspecting the danger of such a thing. They are generally scared away by the noise which the Indians make in swimming, especially the black ones; for the red are considered more bold and more dangerous by the Abipones. But I myself have found that crocodiles of any colour, whether in the water or on dry land, are perfectly harmless. Crossing rivers in a bull's hide, or low boat, I have often seen crocodiles swimming past, with erected heads, sparkling eyes, and gaping mouths; but knowing them to be harmless, I beheld them with the utmost unconcern. In the town of the Rosary, scarce a gun-shot from my house, there was a pool swarming with crocodiles. The town of St. Joachim was surrounded with lakes. About sun-set we often went out to breathe the fresh air, and in our walk always met with crocodiles of every age and species, but never received any injury from them, though unarmed, and perhaps on that account more safe: for it is my opinion that crocodiles have been injurious chiefly to those by whom they have been themselves injured. They spare those that spare them. I do not in the least

wonder that in the territories of Quito, and Nuevo Reyno, and in certain parts of Asia and Africa, crocodiles have shown the utmost fury towards men, when they are daily tormented, taken, and slain, by the inhabitants, who feed regularly upon their flesh.

Different nations make use of different artifices in hunting and killing crocodiles. Some go upon the river in boats, and throw into the water a piece of wood, to which flesh or fish is fastened with a long rope. The crocodiles swallow the wood along with the flesh, but as it is crossed in their jaws, are unable to throw it up, and being dragged to the bank by means of the rope, are presently killed. Others take a long, sharp, pointed piece of timber, and when the crocodile approaches thrust it deep into the animal's jaws, by which means it is killed without danger. The Abipones generally pierce those crocodiles with a spear which they find lying basking in the sun quite stiffened with cold. An arrow, though extremely strong, unless it touch the neck of the crocodile, where the skin is softer, always proves a weak and precarious instrument of death. The same may be said of bullets. Though crocodiles are perfectly harmless to mankind in Paraguay, they are in like proportion destructive to fishes, which are either consumed or put to flight by

them. They are useful in medicine. Wounds inflicted by a crocodile are happily cured by being smeared with the fat of the same animal. One of their intestines, when dried and reduced to powder, is a remedy for the pain of the stone. Little stones, like common flint, found in the stomach of the crocodile, are said to be very efficacious in curing quartan agues, and stone in the kidneys, if reduced to powder and drunk. I have observed elsewhere that envenomed wounds of snakes are both healed and prevented by crocodiles' teeth, and shall tell you many things relative to the use of this remedy, in their proper place.

If I have been too prolix in my remarks on this prince of amphibious animals, the reader will excuse it, for I shall aim at brevity in treating of more ignoble creatures.

THE AGUARÀ, OR WATER-DOG.

In lakes and rivers dwells the water-dog, called by the Guaranies aguarà, and I have often seen it in plains near the shore. Though larger than a mastiff it is afraid of every thing, takes to flight on espying a man at a distance, and is an object of fear to no one. Its ears resemble those of an ass, its head that of a dog. It has plenty of strong and sharp teeth. By night it roars very loud, and lies in wait

for lesser animals. The Abipones hunt it for the sake of its skin alone, which is shaggy, of a dark yellow colour, and marked along the back with a black line like an ass. Its hair is extremely soft and much valued by the Spaniards on account of its efficacy in assuaging sciatica, gout, and pains in the bowels. Some lay it upon saddles, finding its warmth extremely salutary. On returning from Paraguay I brought some of it home, but it was stolen from me, a loss which I regret to this day.

THE YGUARÒ, OR WATER-TIGER.

This beast, which is larger than a mastiff, is generally concealed under deep water. It is shaggy, with a long tail, ending in a point, and is armed with very strong nails. It lays hold of horses and mules, as they are swimming across rivers, and drags them to the bottom. Shortly after, the bowels of the animal, which it has torn to pieces, are seen floating on the surface of the water. The yaguarò generally dwells in deep gulphs of rivers, but digs large caverns in the higher banks, where it can hide both itself and its offspring. On the high shores of the Paraguay, we often heard a tremendous noise in our nightly navigation, and the sailors and soldiers informed me that it proceeded from those caves, which were hollowed

by the continual dashing of the water, and had at length begun to gape.

THE AÒ.

This dreadful beast, which has a head and claws like those of a tiger, which resembles a mastiff in size, has no tail, and possesses singular ferocity, and equal swiftness, is called by the Guaranies aò, a word signifying clothing, but given to this beast because, from its wool, the Guaranies formerly wove themselves garments. They wander gregariously in pools, marshy places, or woods far from the noise of men. But if one of them chance to meet an Indian hunting, his life is as good as gone, unless he can avoid its cruel fangs, by a very swift flight, or by ascending a tree; though when seated on the very highest boughs he cannot be perfectly secure, for as these ferocious animals are incapable of climbing a tree, they will tear it up by the roots with their claws, and when it falls seize hold of their prey. These things the Indians and Spaniards all agree in relating and believing. For my part, after so many journeys on foot, and on horseback, after traversing so many of the woods, plains and marshes of Paraguay, I never saw even the shadow of such a beast. From which I infer that they cannot be very numerous, nor com-

mon to the whole province. Would that they were banished from every part of Paraguay! That ferocious animal which writers call *famacosio*, most of us think to differ from the aò in name only.

THE CAPIIGUÁRA, OR WATER-PIG.

The water-pig inhabits the larger rivers and streams, but not the very largest, although, as it feeds upon grass, it comes out to pasture in the neighbouring plains, not without committing great depredations in the fields. When full grown it resembles a pig of two years old in size, and almost in appearance, except in its vast round head, and the whiskers on its upper lip, which are similar to those of a cat. It has short ears, large, black eyes, a very wide mouth, but rather narrow lips, dusky and very short hair, and no tail. Besides two long, curved tusks, which project from its mouth, it is armed with forty-eight teeth, plain at the top, but hollow beneath. Its feet are like those of a pig; the front ones have four nails, the hind only three. These beasts swim or walk in company, and cross rivers with surprizing expedition. By night they bray like asses, and sometimes alarm travellers unacquainted with America. Their flesh is very like pork, but as it has a fishy taste, is eaten by none but the

Indians; though when young they are reckoned a dainty by Europeans even. Capiiguáras may be wounded without difficulty, either with a spear, an arrow, or a ball, but it requires great good fortune to catch them; for on receiving a wound, as they are excellent swimmers and divers, they immediately hide themselves under water, and extract the arrow or spear which is sticking in their flesh. The Abipones, who frequently employ themselves in hunting these animals, after wounding a pig, swim after it and overtake it in the water. The skin of the capiiguára is very thick, and were it properly dressed, would be useful in various ways.

THE OTTER.

Otters swarm in the lakes and rivers of Paraguay. If I mistake not, they differ from those of Europe in no other respect than in being somewhat smaller. They are most numerous in the Abiponian territories, and those adjacent to the cities of Sta. Fè, Cordoba, and Corrientes. In the distant hordes of the Mocobios and Abipones, towards the north, there are no otters, or very few at least. The savages make use of them in various ways. They feed upon their flesh, and make cloaks of their skins.

When the lakes and rivers are almost exhausted by a long drought, the Abipones go

out to hunt otters. If the water is shallow enough to ford, hounds are sent forwards, and many hundreds killed with stakes in one day; though they are extremely apt to bite, and have very sharp teeth, on which account, in killing them, both the Indians and their dogs often receive wounds which are not cured in a few days.

THE YGUANÀ.

The yguanà, an animal of the lizard kind, closely resembles the dragon which St. George is represented overthrowing. It is sometimes more than an ell long. Its belly is large, its skin clothed with green, white, and yellow scales, elegantly varied with red. From the head to the extremity of the tail, the spine of the back is surmounted by a denticulated fin. Its thick and very long tail is marked with kinds of black rings, intermixed with red ones, and ends in a very slender point. It is furnished with large black eyes, a nose spreading as wide as the lips, short teeth, a cloven tongue, which, when irritated, it moves very quickly, four feet, and lower down five nails, wide like the sole of the foot, and covered with a thin web, which assists it in swimming; for it sometimes swims in the water, sometimes climbs trees, and sometimes lurks for a long time in corners of houses, being very patient of hunger. It never does harm to any one.

It feeds upon honey, little birds' eggs, oranges, sweet citrons, and other fruits. It is incredibly tenacious of life, for after being stripped of its skin, and having received frequent wounds on the head, it will not die, till its head be severed from its body. Though the horrible form of the yguanà inspires all beholders with terror, yet its extremely white flesh delights the palates of many. Deceived by my companion, I ate it for fish, and at another time for chicken, and pronounced it exceedingly savoury. But I never could prevail upon myself knowingly to taste the yguanà, so great was the horror which I conceived of its external appearance. The yguanà lays about forty eggs in as many days; they are round, about the size of a walnut, and of a white or yellowish hue, like hens' eggs. Some people eat them fried. As they abound in their own native fat, water is poured on them instead of oil or butter. They say that little stones are sometimes found in the head of the yguanà, which, when ground to powder, and drunk with a wholesome potion, or simply applied to the body, diminish or remove stone in the kidneys. Others affirm that a stone, an ounce in weight, is found in some other part of this animal's body, which, when reduced to powder, and drunk in tepid water, removes obstructions of the bladder. I never saw any

stones of this kind—never tried their efficacy! Besides this, other kinds of lizards, of different forms and colours, are seen in Paraguay, but I have nothing remarkable to relate of them. The chameleon is very seldom seen here. I once saw one jump hastily out of a boat which lay on the ground near the shore, but had not time to examine it closely.

RIVER-WOLVES.

Many rivers, and even lesser streams, produce two kinds of wolves, a larger, and a smaller. Sometimes the Abiponian women tame the whelps at home, suckling them like their own children. They also do the same kind office for puppies, although no wife can suckle another person's child without greatly offending her husband, and running the risk of being divorced. These wolves are killed with various weapons by the Abipones, who, though their flesh is not fit for food, make use of their skins, which are of a dusky colour, but yellow at intervals, with extremely soft hair.

SEALS.

Seals are remarkable for the size of their bodies, and are very numerous in the river Plata, especially at the mouth by which it enters the sea. They have more fat than flesh, so that

hunger alone could induce me to taste them. But their skin, of an elegant yellow colour, marked with a black line on the back; and covered with very soft hair, is much prized by Europeans. Our companions, who, at the command of King Philip the Fifth, sailed to the shores of Magellan, record that seals in that place often exceed a bullock two years old in size; that they often strive with one another on the sandy shore, lifting up their bodies as straight as a pillar, and that many geographers have erred in saying that these seals have a mane, and in giving them the name of sea-lions. This is no affair of mine; let others decide the point. I think the dispute is all about a name.

FROGS AND TOADS.

At the end of the amphibious crew come frogs and toads, which swarm in all the rivers, lakes, and marshes, and even the very plains of Paraguay. But what is their use, what their occupation? They go on singing their old complaint in the mud, though in Paraguay they have nothing to complain of; for not being reckoned amongst the number of eatables, and being entirely excluded from the kitchen, they are neither desired nor attacked, and consequently live in the completest security. To destroy the

race of frogs, I had long wished that the voracious Indians would take it into their heads to eat them, for whenever we slept in the open air by the side of a river or lake, we were exceedingly annoyed by their croaking. Their voice, as well as colour, is extremely various, for some utter a gentle, clear, sharp sound, others, perhaps the more aged ones, a rough, hoarse, disagreeable croaking. Of toads, horse-leeches, and other insects of that description, we shall speak in another place.

BIRDS.

Paraguay has scarcely any European bird, except the swallow, but it abounds in native ones, foreign to Europe. The former excel in the sweetness of their voice, the latter in the elegance of their plumage. Out of many I will describe a few.

THE HUMMING BIRD.

The most curious is a bird, which is the smallest, and at the same time the most beautiful of all the winged tribe. The Spaniards have with justice named it picaflor, for it plucks the flowers out of which it sucks juice like a bee. It charms the eye with the exquisite beauty of its colour and plumage. The whole of its little body is scarce bigger than an olive or a nutmeg.

Its bill is very long, but slenderer than a needle, its eyes extremely lively, and its tongue broad, but thinner than a silken thread. It sometimes utters a shrill whistle which can hardly be heard. In the country, in a chapel that had long been deserted, I found the nest of one of these birds; scarce bigger than a common walnut, it hung suspended by a horse-hair from two corners of the wall, and in it the mother was then sitting upon two little eggs. Its feathers are sometimes of a bright green, sometimes (for there are nine different species of them in Paraguay) of a blue, sometimes of a fiery red colour; but all seem clothed with most refulgent gold. That brilliant hue which shines in the expanded tail of a peacock, or in a drake's neck, is dull in comparison with the golden resplendence of this little bird. In sucking juice from flowers it does not stand upon its feet, but seems to hang in the air, and is always borne swiftly along, with its feathers suspended and tremulous. Some have caught birds of this kind and brought them home, but though carefully fed upon melted sugar, they never lived more than four days, being always used to the nectar of flowers. With their feathers, which nature has painted with the most exquisite colours, and tinged with gold, the Peruvian Indians are said to have adorned such

elegant little images, that you would have sworn them to be formed by the pencil of an artist, and gilded.

THE CONDOR VULTURE.

From the least of birds, let us proceed to the largest. The condor, a bird of the hawk species, frequently inhabits the very highest summits of the Tucuman and other mountains, whence it flies down to the vallies beneath to prey upon cattle. It is of an almost incredible magnitude; when its wings are expanded, it measures ten feet, (or, according to some, sixteen,) from the extremity of one wing to that of the other. The hollow part of the quill is equal to a man's finger in width. This bird is furnished with talons like those of a cock, and its beak is so strong and pointed, that it can pierce a bull's hide. It is black, sprinkled here and there with white feathers. On its head it has a little crest, like that of a cock, but not so denticulated. It is possessed of amazing strength, and is formidable to all animals, but particularly to new-born calves and foals; for it tears out their eyes with its beak, and then kills and eats them. It is said to carry away lambs in the air. The devastation these birds daily commit amongst the herds and flocks exceeds belief. Several of them always fly together to rapine, and being

rendered formidable by their numbers, do not scruple to attack even full grown beasts. When satiated and loaded with meat they are unable to fly back again, and try to relieve their stomachs by vomiting, that they may be lighter and more expeditious in flying. The Spaniards who guarded the estates, having frequently observed this circumstance, place in the way of the condòrs beef sprinkled with plenty of salt, which they eagerly devour, but not being able to vomit, are rendered incapable of flying, and slain with sticks and stones whilst coursing up and down the plain. At other times the condòrs, crowding together, make a tremendous noise by clapping their enormous wings, to the terror of all that hear them. They soar so high in the air as to seem from below no bigger than sparrows.

THE EMU.*

The emu, a bird extremely common in Paraguay, is so well known in Europe as to render a description of its figure unnecessary. I will however briefly relate its peculiarities, which no one will dislike to be made acquainted with.

The emu is ranked amongst birds, because it is winged, though it makes use of its wings, which are too weak for the weight of so large a

* The American ostrich differs a little from the African.

body, not to fly with, but to assist itself in walking, like sails and oars, especially when the wind blows in a favourable direction, for when it is contrary they retard its course. To pursue this bird is extremely difficult, for it not only runs with the utmost swiftness, but escapes by turning and winding about. Emus, which fly the very shadow of a man, are seldom caught by persons on foot, unless they be in such numbers as to surround these birds, and take them as it were in the toils. When standing upright, they reach to the head of the tallest man, which is owing to the length of their legs and neck, for their head is very small. They have little eyes overshadowed with large eyebrows. Their body is equal to that of a lamb in weight. Their flesh is much sought and praised by the Indians, and is generally very fat. The Spaniards, neglecting the rest of the flesh, eagerly devour the wings, and think them the best part of the emu. I have eaten them myself sometimes, but a nausea which they created in my stomach gave me a disgust to that food.

The Abipones make themselves bags, purses, and cushions of emus' skins. The skin which covers the rump they use for little hats. Great and various are the uses of their feathers: for of them are made fly-flaps, fans, and skreens, which both the better sort of Spaniards, and the

Abiponian women, in riding, place before the sun, that their faces may not be tanned with the heat. To the hinder part of their saddles, the Indians of every nation fasten the longer emu feathers, which, moving as the horse moves, serve to drive away gad-flies, hornets, and gnats. All the female emus of one neighbourhood deposit their eggs in one place, and the chickens are hatched by the sun's heat, without any other care. The young ones are fed by the males, who break the eggs that are still full, and employ them in feeding the chickens already hatched—thus brothers unborn are devoured by those that have but just seen the light. Sometimes more than sixty or a hundred eggs are found in the same nest, and are eaten both by Spaniards and Indians, either fried or boiled, but are digested slowly and with difficulty if wine be not added to the repast. They often afforded me a sumptuous banquet in travelling through deserts. One egg is enough to satisfy many persons, for the contents of thirty hens' eggs may be poured into the shell of one emu's egg. The shell of the emu's egg is strong, and may be used for various purposes as a potter's vessel. Emus feed on grass, wheat, fruits, or any trash they meet with; but if they imprudently swallow iron or bone, they afterward void it quite undigested, and in no way altered. When

taken young they are easily tamed, and walk up and down the streets or yards, like dogs and hens, suffer children to play with them without fear, and never run away, though the plain be close by, and in sight. There is scarcely any Indian town in which you do not see tame emus of this kind. You must know, moreover, that emus differ in size and habits, in different tracts of land: for those that inhabit the plains of Buenos-Ayres and Tucuman, are larger, and have black, white, and grey feathers; those near to the straits of Magellan are smaller and more beautiful; for their white feathers are tipped with black at the extremity, and their black ones, in like manner, terminate in white, and make excellent ornaments for the hats and helmets of Europeans. The higher orders amongst the Spaniards, also, greatly prize skreens made of these feathers.

THE TUNCÀ.

The tuncà is remarkable on account of its bill, which is as long as its whole body, is as light as paper, of a citron colour, marked at the extremity with a red line, and a black spot, and denticulated at the edges. It has a very long tongue, and rather large eyes, surrounded by a circle of green, and another larger one of yellow. Its feathers are, for the most part, black, ex-

cept on the neck, which is white, and the tail, which is beautifully red at the extremity; but some are blue instead of black. It is about the size of a pigeon. The tuncà is called by some, the preacher bird, I believe on account of the loudness of its voice. You will scarce ever see this bird in company with any other. It feeds on the ripe seeds of the tree caà, but as those seeds are too glutinous to be digested, it voids them whole, and they produce new trees, and in time woods, to the great profit of the inhabitants. I knew a Yaaucaniga Abipon, who, when going to fight, always tied the huge beak of a tuncà to his nose, in order to render himself more terrible to the enemy.

THE CARDINAL.

Cardinals are remarkable for the extreme sweetness of their song, and, in my opinion, would far exceed the canary birds of our country, were they able to trill like them. From the shining purple of their feathers they have obtained the name of cardinals. The top of the head alone is adorned with a small black crest, like a little hat. They are about the size of a linnet. They fly in crowds to the most barren fields, where there are more thistles than grass, and are easily caught by boys, who

will give you four or five cardinals in exchange for a single needle, in the city of Corrientes. I have seen cardinals resembling the rest in other respects, but much larger, being equal in size to a starling.

THE CHOPÌ.

The chopì, which is about the size of a swallow, and has dusky feathers, but if shone upon by the sun, of a blue colour, goes in flocks like European sparrows, flies up and down houses, and wheat fields, and delights the ear with its pleasing song. Some very small birds, the names of which I am unacquainted with, sing sweetly in gardens, but when taken they cannot long bear the confinement of a cage.

THE QUĨRAPÙ.

The quîrapù, a Guarany word, signifying the tinkling bird, so called because its voice is like the sound of a little bell, resembles a pigeon. It is of a grey colour, has very beautiful eyes, a large head, and a green throat, which is inflated when the bird cries. It never stays long in one place, but passes quickly from tree to tree; on which account it is very seldom, and with great difficulty, caught. Other birds of the same name, (quîrapù miri,) but smaller, and

of a white colour mixed with dusky, fly in companies, and whilst one utters loud sounds, all the rest are silent.

THE TIÑINI.

The bird tiñini imitates the human voice, particularly at night, and not unfrequently alarms strangers sleeping in a wood, who take it for some enemy or spy.

THE TIJERAS.

This bird, which is smaller than our sparrow, and entirely white, is called by the Spaniards tijeras, the scissars, because it sometimes opens and shuts its tail, which consists of two long and very white feathers, like a pair of scissars.

VARIOUS KINDS OF WILD DOVES.

The apicazù, yeruti, and other kinds of wild doves, wander about in flocks, doing great mischief to fields and gardens, especially to grapes. From their wonderful variety of colours they are pleasing to the eye, but still more so to the palate, when boiled or roasted.

THE IÑAMBÙ.

This bird inhabits every part of the plain country. In some respects it resembles a part-

ridge, in others a quail. Its flesh is extremely white and well tasted, but very dry. You will seldom see a stupider bird, or one more easily and more frequently caught. A man on horseback sometimes goes round and round it, and whilst the bird goes round in like manner, knocks it down with the long piece of leather, which they use for a bridle, or with a slender reed. Numbers are daily brought to the city of Buenos-Ayres, and sold at a very low price.

MARTINETES AND GALLINETAS.

There are other birds also, thought to be of the partridge kind, which are larger than a common hen, adorned with a variety of colours, and a beautiful crest, and of an agreeable savour.

DIFFERENT KINDS OF PHEASANTS.

Birds are found in Paraguay which, in some respects, resemble European pheasants. The commonest species is the yacù. This bird is equal in size to a full grown hen; its feathers are of a very black colour, and its flesh extremely well tasted. It mostly frequents woods near a river or lake. At sun-set or sun-rise, you may find a number of them on one tree. When one is brought down by a gun, the rest do not fly away, but only recede a little farther on the

bough which they are sitting upon, and there remain till they are all killed by repeated firings. This I have often witnessed, and wondered much that the birds were neither scared by the report of the gun, nor impelled to flight by the deaths of their companions.

THE MBITUÙ.

In the larger class of pheasants, we may with justice place the mbituù, a bird which almost resembles a turkey-cock. Its very black feathers are white at the extremity, but the belly is varied with a colour peculiar to partridges. On the top of its head it has a crest composed of black and white feathers, as soft as silk, which it erects when angry. It is armed with a long, hooked, and blackish beak. Its tail is long and generally expanded. Its beautiful head is adorned with large bright black eyes. Its very long legs are supported on four claws like those of a hen. Its tender flesh is universally commended, and as it is so desirable for the table, I wish it were more commonly met with in the woods by the Indian huntsmen.

VARIOUS KINDS OF PARROTS.

The variety and multitude of parrots I might almost call innumerable. Every different spe-

cies differs distinctly in form, voice, and plumage. Those with which I am best acquainted are the paracauteè, the paracaubaỹ, the iribaya, the aruaỹ, the tuî, the mbaracana, the quaà, or quacamayo, the caninde, the catita, or kikilk; and others whose names have slipped my memory. I will relate what is most remarkable respecting those which I know most of. The paracauteè signifies the true and legitimate parrot, which excels the rest in sense and docility, and can imitate the sounds of men and beasts with greatest ease and success. It is equal in size to a young pigeon: its feathers are green, but yellow, red, and blue on the head, wings, and tail. I had in my possession a bird of this kind, which I called Don Pedro, and which articulately pronounced many words, and even whole sentences, in the Spanish, Guarany, and Abiponian languages, and learnt to sing a little Spanish song admirably. Moreover he could imitate violent coughing, laughing, weeping, barking, and an hundred other things so dexterously that you would have sworn it was a man you heard. Whenever I travelled on foot or on horseback, he sat upon my shoulder, always chatty, always playful. When tired of his noise or his weight, I gave him to one of the Indians to carry—he angrily bit the man's ear, and flew back to me. He

laughed very loud for a long time at an old Indian woman, whom we met riding on an ass. Though he reposed all day long on my shoulder, yet about sun-set, like fowls, he felt a desire for rest, began to grow angry, and, by clapping his wings, and repeatedly biting my ear, admonished me to stop the journey. Next day when I mounted my horse again, he was extremely delighted, and did nothing but sing and laugh. When I stayed in the town, he sometimes walked up and down a very long rope suspended from two pillars outside the house. When I entered the dining-room he would fly after me, and whilst we were dining, ran about the table, and always flew angrily to bite the Indian who came to take away the rest of the food with the dishes. He tasted, snatched, and swallowed any food that he could lay hold of. He sometimes walked about the court-yard, rubbing and sharpening his beak in the sand, which he often swallowed by way of medicine. Seeing me caress a smaller parrot of another species, filled with envy he attempted to pierce the bird with his beak; but softened by a little coaxing, he not only suffered it to sleep under his wings, but ever afterwards treated it as a pupil, or rather as a son. What the older bird pronounced with a deep voice, the younger repeated in a slenderer one. The Guaranies

tie all their tame parrots, by one foot, to a long pole, to prevent them from flying away. These chains did not please me: I therefore clipped one wing of my parrots a little to prevent them from flying long, or far away, leaving them the full liberty of their legs. This Don Pedro of mine, after continuing many years faithful, took advantage of the circumstance of his feathers having grown a little too much, to fly away and disappear. He was sought by many, but without success. At the end of three days he saw me passing through a wood, and knew me instantly. Without delay he crept swiftly along the boughs by the help of his beak and claws, and flew to my shoulder, repeating the words Don Pedro. But though he lavished unbounded caresses on me, he atoned for this desertion by the mutilation of his feathers. I often wondered to hear this parrot repeat the sentences that he knew so opportunely, as if he understood the meaning of them; for when he was hungry, he cried *pobre Don Pedro*, poor Don Pedro, in a tone calculated to excite compassion, repeating those words again and again, till eatable roots, bread, or some other food was given him. These particulars, relative to my parrot, the memory of which is still dear to me, I have, perhaps with too much prolixity, related, in order to show you how great is the power of

education, even upon brute animals. Female parrots learn to imitate human speech quicker and better than the males. My companion had one which could repeat the Lord's Prayer in the Guarany tongue. I could have fancied I heard a child praying. This circumstance is very surprizing, as we find that the females of other birds are almost mute. I never could understand how parrots, brought by Englishmen or Dutchmen from the remotest parts of Asia, Africa, or America, after travelling about so many months, or years perhaps, learn to pronounce sentences either in German or French, or any other language, when in Paraguay it is thought impossible to teach them to speak, unless they be brought unfledged from the nest; for when full grown we have found them quite indocile. They are most conveniently taught at night, or in a dark room, where no object presents itself to their eyes, no sound to their ears: though, whilst walking on their rope, or on a pole, in the court-yard, they insensibly learn to imitate dogs barking, horses neighing, cows lowing, old men coughing, boys whistling, laughing, or crying—being extremely attentive to every thing. By long experience I have found that parrots of every kind will learn better and more willingly from wo-

men and children, whose voices are sweeter, than from men.

The paracaubaỹ is of the same size and form as the paracauteè; but its feathers are almost all green, with but a very sparing admixture of blue ones, and perhaps a little yellow, or red feather here and there on its head, wings, and tail. These birds babble some unintelligible stuff, but never utter an articulate sound.

The aruay, which is somewhat smaller than the former, is of a most lovely shape, adorned with red, yellow, and bright green feathers, and capable of talking a great deal, if instructed.

The iribaya, which scarce exceeds a European linnet in size, is sparingly besprent with a few dark green, red, and blue feathers, and is distinguished from the rest by a white circle round the eyes. Though of a very lively temper, garrulous, restless, and apt to bite, it is unable to learn to talk, and has a harsh voice. Some woods abound to such a degree in these birds, that no other kind of parrot can be seen there.

The mbaracanà, and others of the same kind that are entirely green, being devoid of all beauty and docility, are seldom taught by the Indians. The tuỹs are divided into many species. The greenness of their plumage is praised

by every body. The least of them does not exceed a man's little finger in length; they are extremely merry, and more apt to bite than any of the rest.

The largest and most beautiful of all the parrots which Paraguay produces, are the quaà, or quacamayo, and the caninde; the latter of which is adorned in every part with feathers of a Prussian blue, and a dark yellow colour; the former with very red and dark blue ones. Their tail is composed of feathers a cubit in length. They are alike in form and size, in which they far exceed a common cock. Their beak is so strong that it would pierce the hard bark of an almond tree at one stroke; you must be cautious, therefore, in handling them. At home they are tamed sooner than you would believe it possible. In the town of St. Joachim I had in my possession some very gentle quaàs and canindes. They walked every day about the yard, and would never suffer themselves to be separated, but always kept company together, and were always quarrelling, so that you might apply to them the words of the poet, *Nec tecum possum vivere, nec sine te.* They never learn to speak any thing but their own name, which they articulately and clamorously pronounce with a harsh voice. I had often wished to have an unfledged caninde brought me from

the nest, feeling quite sure that I should be able to teach it to speak; but these wishes were vain; for the old Indians who were born in the woods, and had long dwelt there, all replied with one accord, God, the Creator of all things, alone knows where the caninde builds its nest. For it is thought to hide its offspring in the hidden recesses of the wood, and from thence, when they are advanced in age, to fly with them to the open plains. Though so many kinds of parrots are exposed for sale at the shops of Lisbon, or are exhibited in the gardens of the chief people there, yet the caninde, which yields to none of the parrot kind in beauty, is never to be met with out of Paraguay, nor is it found in every part of that province even; for, like the other more elegant parrots which I have described, it only inhabits the northern forests. In the more southern regions, parrots of the largest size, but of a sombre dark green colour, and annoying to the ears by their senseless clamours, fly in crowds about the groves, especially those composed of palm trees; where wander also great numbers of very small parrots, about the size of a lark, adorned with pale green feathers, and called catitas, or kikilk. They are merry, playful, cunning, and may easily be taught to pronounce some words. They are kept in lea-

thern cages. Incredible is the mischief they do to fields sowed with maize. Guards are necessary to keep them off. The Indians know how to change the natural colour of the parrot into any other they choose. They pull the feathers up by the roots, and rub the place from which they have been plucked, till it grows red, and blood flows from it; they then instil and press into the pores or sockets of the old feathers, juice of any colour they like. If the wings or tail be imbued with a yellow, red, or blue colour, yellow, red, or blue feathers will grow there. This was practised amongst the Brazilians, Guaranies, and, according to P. Joseph Labrador, amongst the Mbaya savages. The same Father observed that the Indians performed the operation in the beginning of spring or autumn, that green is very easily turned into yellow, and that yellow feathers, if plucked up, will be succeeded by none but yellow ones. Why might not the experiment be tried upon European birds? A red canary, a yellow nightingale, and a blue lark, would certainly be curious objects.

As the beautiful colours of parrots, and their merry garrulity delight the ear and eye, their flesh, in like manner, is extremely pleasing to the palate, but being rather hard, must be beaten a little while, before it will become

tender. As parrots are exceedingly suspicious, all times are not equally proper for hunting them. When they assemble on the highest boughs, one of them occupies the top of the tree, that, if any body approaches, he may warn his companions of their danger, and exhort them to flight by sudden clamour. About sunset they compose themselves to rest like hens. A great crowd generally assemble on one tree, and as each strives to get the highest bough, continual quarrels ensue—one trying to push the other from the seat that he has obtained, whilst, amid horrid clamours, the feathers that they have torn from each other with their beak or claws, fly about in all directions. During these contentions for the highest place, the hunter steals softly thither, and with a gun, or a bow, knocks down the disputing bipeds. If ever you hear the parrots, which you see in the houses of the wealthy, called by other names than those I have mentioned, remember that they must have been brought from other countries, of Asia, Africa, or America. White parrots, with a little red crest, called cockatoos, and others of a grey colour, which I have often seen in Germany, are unknown to Paraguay. The smaller parrots, which we call tuỹ in the Guarany tongue, have the French name perroquet given them in Europe.

INDIAN CROWS.

Indian crows are black, like those of Europe, but much longer; their head and neck, as far as the beginning of the wings, are bald, smooth, quite destitute of feathers, but full of wrinkles. These birds subsist on the carcasses and entrails of slain beasts. Whenever oxen are killed in the open plain, as usual there, they perch upon trees or roofs of houses, presently rush down upon the intestines, and one taking each end, carry them through the air like a long rope. Their king is clothed with extremely white feathers, and though very seldom seen, flies accompanied by the other crows, as by satellites. As birds of one feather flock together, the Abipones, who live on rapine, bring up the young of these rapacious crows at home, as they become wonderfully tame: for they accompany their masters when they ride out to hunt or enjoy the country, partake their fare, and return when they return, but sometimes suffer themselves to be enticed away by flocks of crows which they meet on the road. Crows' feathers are generally chosen for arrows by the savages, on account of their strength.

THE CARACARÀ, OR CARRANCHO.

Kindred, and allies of the crows, are birds

which the Spaniards call caracarà, or carrancho. Their body is of a yellowish grey colour, but spotted with yellow and white. They are about the size of a hen, and resemble a hawk in their head, hooked bill, eyes, long claws, and long tail. They feed upon carcasses, like crows, and do a great deal of mischief amongst hens and other birds. Their flesh is of no use.

VARIOUS KINDS OF HAWKS.

Caracaràs are followed by kirikirì, different kinds of hawks, spotted with various colours. Amongst them are the common hawk, the gos-hawk, or gerfalcon, &c.

Of owls, the commonest are those which the Spaniards call lechuza, and the horned owl, which the Spaniards call mochuelo. Bats are of various kinds, and very common, as shall be shown hereafter.

THE GOOSE.

Water-fowl are so numerous, and of such various kinds, that it would fill a volume to describe them properly; I shall therefore only speak of some of them. I have, though very seldom, met with an immense number of geese like those of Europe in lakes. But of ducks there is such a variety and number, not only in the lakes but in the rivers also, that their dung

defiles the water so as to render it unfit to be drunk.

VARIOUS KINDS OF DUCKS.

Ducks, clothed with black and white feathers, are extremely numerous, and pass the day in the water, and the night in trees close by it. They are most easily and frequently shot out of the water. Their young, when removed to towns, seldom become tame. Other ducks, which the Abipones call roakabi, have feathers of various colours, and beautifully red feet. Small ducks, called by the Abipones ruililiè, flit about together at night, making a loud hissing, and are believed by the Abipones to be spirits of the dead. The most remarkable are certain middle-sized ducks, of a beautiful rose colour from the head to the tail, but their natural ill smell annoys the nostrils of all who approach them, as much as the beauty of their plumage delights beholders. Under the beautiful feathers of their wings and the rest of their body, (of which not only the plume, but the quill, which we use to write with, is tinged with a deep red colour,) is concealed skin, bone, and a very scanty portion of most stinking flesh. They are slenderer than geese's quills, and are used by the Abipones to adorn and crown their heads.

STORKS.

Paraguay is not destitute of river-fowl, very like European herons and storks.

THE HARIA.

The haria, which is about the size of a stork, boldly attacks serpents, pierces them with its bill and eats them. It soon grows tame in the houses of the Spaniards, and is very useful in gardens by killing noxious insects. I was often moved to laughter by another river-fowl, which, when it stretches out its neck, exceeds a tall man in height, and a lamb in the size of its body. This bird is entirely white, and has very long feet. It stands for many hours motionless, as if meditating, in the water; but I confess that I have forgotten its name.

WATER-CROWS.

In the river Parana, and elsewhere, numerous water-crows are seen. Their young are devoured with avidity by the savages, though they all detest the thought of eating birds, hens, or chicken. It would take a long time to mention all the various kinds of water-fowl which swarm in the larger rivers and subsist wholly on fish.

SWALLOWS.

Before I proceed from birds to fishes, I think proper to subjoin a few remarks upon common hens and swallows, the latter of which no ways differ from those of Europe in appearance, voice, and habits. Although Paraguay is free from snow, yet as the south wind renders the air rather cold in winter, the swallows migrate like those of Europe to other places about the beginning of autumn, and pass the winter in some unknown retreats, but return at the commencement of spring.

BRAZILIAN FOWLS.

The Paraguayrian hens have the same form and variety of colour as the European. A few years ago, hens much larger, but not better than the common ones, were brought into Paraguay from Brazil. Their flesh is hard and unsavoury. The chickens are not clothed with feathers within several weeks. The cock is unusually large, and instead of the crest which those of our country wear, displays a large purple crown. Now let us proceed to the scaly tribes of Paraguay.

VARIOUS KINDS OF FISHES.

I never found any European fish throughout

the whole extent of Paraguay, but many in some respects resembling them. Those best known to me I will describe under their Spanish or Indian names.

THE DORADO.

The fish dorado has obtained the name of the golden fish from its scales, which shine like gold. It is of great weight, and affords solid, white, and savoury flesh. Its head is justly reckoned a dainty, though almost all other fish have their heads cut off in Paraguay, before they are brought to table.

THE PACÙ.

The pacù is remarkable not only for length but breadth, and the savouriness of its flesh, which is prized for its abundance of fat. The scales are of a dusky, and in some of a sulphureous colour. The head seems too small in proportion to the rest of the body. The Parana, and even the lesser rivers which unite with it, abound in this most excellent fish.

THE CORVINO.

The corvino is generally caught in the neighbourhood of the ports of Monte-Video and Maldonado, where the fresh water is mingled with the salt water of the river Plata. It has some-

what the appearance of a carp, but excels that fish so much in size and savouriness, that it is eagerly sought by distant cities.

THE MUNGRÚLLU.

The mungrúllu is perhaps the largest and strongest of the Paraguayrian river-fish. It sometimes weighs more than a hundred pounds. Its flesh is firm and red.

THE ZURUBÌ.

The zurubì, a fish scarce inferior in size to the former, is not covered with scales, but with a slippery skin of a greyish colour, and mottled with large black spots. It affords white, solid, savoury, and wholesome flesh. The vast weight of this fish may be inferred from the circumstance that when hung upon a pole, and carried on the back, it is enough to tire two Indians.

THE PATÌ.

The patì is thought almost equal to the former in size and savouriness.

THE ARMADO.

The fish armado is very properly named, for its back and sides are armed all over with very sharp gills and fins, with which it endeavours to wound the fisherman as he is taking the hook

from its jaws, horribly roaring at the same time and tossing itself about, on account of which its head must be crushed with a strong stake as soon as it is taken out of the river. Its head is round, resembling that of a frog; and shielded by a very strong shell. It has small bright eyes, surrounded by a circle of gold. Its mouth is narrow, but rendered terrific by a shaggy beard. The body is of an iron-grey colour, and armed with very hard oblong scales. This fish is thicker than it is long, and often weighs four, often six pounds, or more. Its flesh is solid, extremely well tasted, and on that account thought very wholesome for sick persons. The river Paraguay abounds in this noble fish.

THE VAGRE.

The vagre is a species of trout. Its head is covered with a hard shell, its skin is smooth, slippery, and covered with red spots, and its flesh extremely well tasted. Various rivers contain various kinds of this fish, which are distinguished by the number, size, and colour of their fins and gills, but are all of an admirable savour. Of their bladder, ground with the teeth, and mixed up with brandy, a very strong glue is made.

THE SÁVALO.

The sávalo somewhat resembles our carp, but

is smaller, and more savoury. You scarcely ever see one weighing more than two pounds. This fish is full of thorns. Though very common in many rivers and lakes, it is never caught with a hook.

THE BÒGA.

The bòga differs little from the sávalo, but is superior to that fish, though less abundant.

THE PEJE REY.

The peje rey means the king fish, for in fact, though only middle-sized, its flesh is pre-eminently good. It has a very large head and mouth, and is destitute of fat. It is only caught in that part of the Parana which washes the territories of Sta. Fè, or in the kindred streams, to which this fish repairs to spawn. When fresh, it is reckoned amongst the delicacies of the tables of the wealthy. After being dried by the air only, without a grain of salt, it is sent in quantities from the above-mentioned city to others, and kept a long while, but soon putrifies if it contracts any moisture on the way.

LA VIEJA.

La vieja is a very strange fish, for its whole body is covered with a strong shell, or horny bark, which would resist even a knife. Hence,

when caught it is laid on live coals, together with the shell, and eaten roasted in this manner. It is very seldom taken with a hook, and rarely weighs more than a pound.

THE DENTUDO.

The dentudo abounds every where, and would be extremely palatable, were it not for the thorns with which it is covered. It scarcely ever weighs so much as a pound. I have caught and eaten numbers of them, but have lost many hooks in the process, for they gnawed the line to pieces with their sharp teeth.

THE RAYA.

The raya is a fish of such singular appearance, that it can hardly be reckoned amongst fishes. Its form resembles that of an oval dish with a flat surface. Its back is black, and its belly white. In the middle of its body is placed a narrow mouth or cheek. It has a smooth, slender, but very long tail, denticulated like a saw, and armed at the end with a poisonous sting, with which, whilst lurking under the sand on the shore, it grievously wounds the naked feet of the sailors walking about there, whenever it has an opportunity. The wound presently swells, gets inflamed, and unless hot ashes be immediately applied to it, causes death. It is

a curious fact, that the Abipones use this envenomed sting as a pen-knife to open a vein. The flesh of the raya may be eaten; but it is generally thought that hunger alone could render it palatable, though I must say, that, well fried, it was not unpleasant to my taste. The size and form of these fish vary in various kinds; (for there are many species of them). They appear to be viviparous, for embryos are frequently found in their insides.

THE PALOMETA.

The palometa is more formidable to swimmers than any crocodile; for its jaws, each of which is furnished with fourteen very sharp, triangular teeth, like so many spears, are its armoury, with which it attacks any part of the human body, and cuts it off at one blow. I myself have seen a strong Abipon with the sole of his foot severely wounded by this fish, and an Abiponian boy with four of his toes cut off by it and hanging only from a bit of skin. To prove the credibility of the fact, I must tell you that the Abiponian women use the jaw of the palometa to shear sheep with. The Abipones also, before they were in possession of iron, used it to cut off the heads of the Spaniards. This fish is found every where in great abundance, but is smaller in the smaller rivers, where it scarce

weighs half a pound, while in the larger ones it grows to the size of two or more pounds; but its length never corresponds to its breadth. It has a curved back, thick head, wide mouth, small round eyes, and a broad forked tail. Besides the formidable jaw which I have described, it threatens all assailants with large, long gills, and seven sharp fins, the largest of which is situated in the middle of the back, and runs towards the tail. The body is covered with faint grey spots, interspersed with red, blue, and yellow. The flesh is firm, white, and very savoury; I wish that it were not so full of bones. When the hook is extracted, these fish must be handled with caution, otherwise they will wound you with their teeth or fins.

THE MBÙZU.

In muddy pools, and even in rivers, you see fish very like European eels, and not eaten by the Indians, on account of their snake-like appearance. Our eating one of these fishes, caused a report amongst the Indians that Europeans fed upon serpents. Whether these fishes are really eels, or of the serpent kind, I will not pretend to determine.

THE RIVER-CRAB.

Although Paraguay abounds in various kinds

of choice fish, it is almost destitute of crabs. I had long heard that some very small crabs, not like those of the sea, but like those in the rivers of Germany, were found in certain streams in the territories of the Uruguay; and I myself saw some which were brought to our table in the Uruguayan town of Concepcion; but they were pygmies in comparison with ours, and might be called mere shadows, and embryos of crabs. After travelling, sailing, and fishing so much in Paraguay, as I never saw any other cray fish beside these, it is my opinion that there are none, or very few indeed. But there are a great variety of sea-crabs.

RIVER-TORTOISES.

The rivers, lakes, and streams, abound in tortoises, but not of that kind the shells of which are valuable in Europe, and fit for working. No sooner did we cast a hook into the river than a tortoise would bite, but was always rejected by us; for in the greater part of Paraguay these animals are eaten neither by Spaniards nor Indians. The only useful part of tortoises in Paraguay is their great shells, which are used for pots and plates by the common people.

LAND-TORTOISES.

Whilst the Abipones, Guaranies, and other

Indians with whom I was acquainted, not only abstain from eating tortoises, but even detest the very idea of such a thing; the Chiquitos, on the contrary, make them their chief food during the greater portion of the year. They laboriously hunt after these animals, which are marked with various colours, in the woods and rocks, that provision may not fail them during those months in which their territories are inundated by an annual flood; for as there is more wood and mountain than plain country there, the deficiency of pasture renders it impossible that as many oxen can be raised and killed, for the support of the Indians, as in the colonies of the Guaranies and Abipones. The tortoise, therefore, supplies the place of beef among the Chiquitos.

SNAILS.

Innumerable snails are seen in their shells in the woods, plains, and the borders of lakes, but are eaten by no human being in Paraguay. Empty snail-shells, burnt to ashes in the fire, are used by the Guaranies for whitening walls, when stones for making lime are not to be found. From the white shells of certain snails, the Vilelas make little round beads, perforated in the middle, which they sell to the other Indians. The Abipones hang round their

necks great heavy strings of these beads, and both men and women think the more they are loaded the finer they are. On the shores of the river Uruguay, there is an odd kind of snail, larger than a man's fist, which the Indians roast in its shell, and devour with avidity. I do not recollect any thing worth mentioning, in regard to shells and shell-fish, if there are any wretched ones to be found here.

WAYS OF FISHING.

After treating of fish, a few observations should be made concerning the various methods of fishing. In the city of Buenos-Ayres the Spanish fishers enter the river Plata on horseback, near the shore, as far as it is shallow. Two of them lay hold of each end of a rope, on which a net is either spread, or closed again, filled with fish; in a few hours they carry to shore numbers of noble fishes, which are immediately put to sale. The Payaguas and Vilelas subsist chiefly upon fish. For fishing they use a very small net, two ends of which they fasten before them, as you would an apron, at the same time holding the two others with their hands. Thus accoutred they jump from the shore into the water, and if they spy any fish at the bottom, swim after it, catch it in the net, which they place under its body, and carry it

to shore. The Indian who has remained beneath the water such a length of time that you believe him inevitably drowned, you will, with astonishment, behold emerging at a great distance, laden with booty. These men are more properly divers, than fishers. If the transparency of the water, as in the river Salado, renders the fish visible, the Paraguayrians pierce them with an arrow, a spear, or an iron prong. The wood Indians catch fishes more usually by craft and artifice than by arms. Sometimes by throwing in sticks, and boughs of trees artfully entwined together, they dam up a river in such a way that, though the fish can enter this enclosure, they are unable to get out again. In other places they throw the plant yçipotingi, which creeps up trees, or the leaves or fresh roots of the caraquata, well pounded, into the water, which intoxicates the fishes to such a degree that they may be caught with the hand as they float on the surface. They often lash the water with the leaves of a certain tree which grows in great abundance near the river Atingÿ, the juice of which is said to be fatal to fishes. The Indians sometimes catch fishes with hooks made of wood or reeds. The common, and indeed the only instrument for fishing that I used, was an iron hook baited with a piece of fresh beef.

LITTLE FLYING-FISH.

Flying-fish are about the size of a large herring; their body is oblong and smaller at the tail; their head large and flat; their eyes round and big, with immense pupils, and surrounded by a yellow circle, and another larger blackish one: their mouth is middle-sized, destitute of teeth, but armed with jaws slightly denticulated. The tail is wide and forked; the wings very large, and composed of a membrane thinner than paper, of a whitish grey colour. They are furnished with six small fins, a bony shell, pointed at the end, and scales of various colours and forms, but shining like those of a herring. They fly out of the water to avoid the dorados, which try to catch them; but in a few moments, as soon, in fact, as their wings are dried by the air, fall back into the sea, and being again moistened are enabled to renew their flight. In various seas they are of various forms and sizes. The Portugueze sailors do not refuse to eat their flesh.

THE SHARK.

But as men of this description have generally too large appetites, and capacious stomachs to be satisfied with "such small deer," they prefer larger fish, especially sharks, numbers of

which they caught, during their voyage, with an iron hook many pounds weight. Sharks generally follow ships, and swallow whatever is thrown out of them, whether it be dead bodies or any other filthy trash. They are of such vast size and weight, that twelve stout sailors are scarce sufficient to drag one with a rope from the sea into the ship. Nor should you be surprized at this, for a shark is about nine feet long, and three or more wide. Its horrid jaws, which contain a triple row of serrated triangular teeth, are prepared to tear any thing. It has a fierce, and ever watchful look. It is covered with very rough skin of various colours. Whenever a shark was taken and gutted by the sailors, its stomach presented a ridiculous spectacle; it looked like a broker's shop full of all sorts of trumpery. In it we found worn out garments, old drawers, hats, whole fowls, and whatever had been thrown by the sailors into the sea. When I found this, I always suspended stones, or cannon balls, to human bodies before I committed them to the waves, that they might sink to the bottom, lest floating on the surface, they should be torn to pieces by sharks. The flesh of this fish, though very white, was tasted by none but hungry sailors; though the females are despised by them even. One, which I had seen them take with

immense labour, they threw back into the sea, on discovering its sex. I cannot tell why they make this distinction. The Abipones roast and eat female locusts, but loathe and reject the males, for reasons known to themselves alone.

DOLPHINS.

During nine months spent in sailing on the Mediterranean and the Ocean, I have frequently seen many others of the scaly tribe, with forms terrible to the sight; but except middle-sized fishes and sharks, I never saw any of the family of Neptune caught by the sailors. When the sea was smooth, and the air tranquil, we frequently observed dolphins tossing themselves merrily about, and appearing as it were to dance; a spectacle by no means pleasing to us, who had so often found this leaping of dolphins the forerunner, and annunciation of an impending whirlwind and tempest.

WHALES.

Immense whales were a very terrible, and by no means uncommon sight to us on the ocean, though they never approached the ship. On the desert shores of Brazil we thought we perceived a pirate ship. Fearing some mischance we called for the captain, who from the top of

the mast by the help of a telescope discovered it to be an enormous whale. This immense animal, as it tossed itself about on the waves, presented the appearance of a ship. A projecting fin, which is said to be sometimes fifty feet high, had been taken for a mast. From the horrid pipe, or fistula of his head, as from a great fire-engine, he spouted up a vast quantity of water, which, when dispersed by the wind, and shone upon by the rays of the sun, looked white like the sails of a ship. In returning to Europe we observed the water leaping up and breaking itself in an unusual manner, not far from the ship. Imagining that rocks or shoals must be at hand, the captain ordered the prow of the ship to be turned in another direction. But an intolerable stench relieved our minds by discovering the putrid carcass of a very large whale, against which the waters had been dashed. Whales perish in the same way as ships, and die by degrees from being knocked against quicksands and shoals. We sometimes, however, see the carcasses of whales cast on to the shore by the tide. I have spoken elsewhere of melotas, enormous fish, innumerable shoals of which we met during some weeks in the month of November. From the water let us now proceed to the woods and plains of Paraguay,

which abound in so many curious plants and trees.

PLANTS.

The Jesuit priest Thomas Falconer, an Englishman well versed in medicine and botany, frequently and openly declared that Paraguay had been enriched by the bounty of nature with so many wholesome plants, roots, gums, woods and fruits, that whoever was skilled in the knowledge of those things would have no occasion for European druggists to cure any disease. Out of many which Paraguay affords either for medicinal or other purposes, I will describe a few in the order in which they enter my mind. I doubt not that botanists have written on this subject more clearly and methodically; whether more faithfully also, I dare not determine with regard to all.

CHINA CHINÆ, OR PERUVIAN BARK.

This tree is peculiarly worthy of note on account of its bark, which is called china chinæ, Peruvian bark, or the remedy for fever. It is of middling height, and not very large, and bears an almost orbicular fruit, somewhat raised in the middle, and by no means fit to be eaten, but which contains two yellowish nuts indented all over like the rind of an almond. It is filled

with a balsamic odour of a dusky colour, and a very sweet scent, but extremely bitter. With this balsam the Indians allay pains in the eyes, head and stomach, if they arise from cold. The bark is naturally white, but when torn from the tree gradually assumes a dark yellow on the surface, a little varied with pale spots: but within, it is of a red colour, not like blood, but like cinnamon, being tinged with a yellowish cast. The taste is bitter, but the smell aromatic and pleasant, though somewhat rancid. Some call the Peruvian bark Jesuits' powder, because the Jesuit missionaries in Peru were the first who made known its singular efficacy in expelling fevers. The celebrated physician Woytz tells us that this medicine was first brought to Europe, in the year 1650, by Cardinal de Lugo, a Spanish Jesuit.

ZARZA PARRILLA.

Zarza parrilla is the root of a green, creeping plant, armed at intervals with very small thorns. It has leaves almost a span long, from the beginning of which proceed two tendrils, with which it entwines itself with other plants. The flowers grow in clusters, and give place to berries, which are first green, then red, and when quite ripe, black, and wrinkled like dry cherries, which they resemble in size and form.

This plant is called by the Spaniards zarza parrilla, on account of its thorns, for *zarza* in Spanish means a thorny plant; *parrilla*, in the same language, signifies a gridiron; as therefore the leaves of this plant bear some sort of resemblance to a gridiron, three pretty large veins running lengthways, crossed by a number of smaller ones, it has received the name *parrilla* or gridiron; but botanists call it *smilax aspera Peruviana*, or *sarmentum Indicum*. The zarza parrilla is very common on the banks of the Uruguay, and the Rio Negro, the waters of which are celebrated for their salubrity; it is also found near the Rio Tercero, in the territories of Sta. Fè, and other parts of America. The most famous is that which comes from the bay of Honduras. The roots of the zarza parrilla, which possess a medicinal virtue, are scarce thicker than a goose's quill, wrinkled on the surface, and of a dusky colour, but white within; all of them grow from the same joint or knot of the plant. They have no particular taste or smell. They consist of rosin, and gum which is the softer part of them. The various uses of these roots are too well known to physicians to need an explanation from me.

RHUBARB.

Rhubarb is the root of a plant of the dock

kind. From out the sheath of the leaves rises a little bunch of flowers divided into many branches, on which hang four blossoms, surrounded with leaves, and bearing a triangular seed. The roots are long, and rather spungy, tolerably heavy, yellowish on the outside, but within of the colour of a nutmeg, variegated like marble, and of a sharp bitter taste. When eaten they create nausea, and have an aromatic flavour. In divers parts of Paraguay, especially in the mountains called La Cordillera, near the city of Asumpcion, as well as at the banks of the rivers Ŷpane miri, and Tapiŧaguaỹ, there grows a kind of rhubarb, similar to that of Alexandria in colour, taste, smell, and virtue, but with this difference, that the leaves of the Alexandrine rhubarb are pointed at the bottom, and broader at the end; whereas the leaves of the Paraguayrian are wide at the beginning, and terminate in a point, like the leaves of lilies. I understand that the East Indian rhubarb, as well as that of Persia, Muscovy, and Tartary, is preferred by physicians to that of America.

THE ROOT JALAP.

Paraguay abounds in the root jalap, the plant of which is called by botanists *Mirabilis Peruviana*. These roots are long, thick, and resinous. Without they are of a dusky brown,

but within of a pure white, without any decay. They not only cure bile, and rheum, but expel other noxious humours from the body. The rosin of jalap is prepared from them.

MECHOACHÀN.

Mechoachàn is a large light root, entirely white at the beginning, but of a dusky colour above. Some call it *bryonia Indica*, but though it resembles the bryonia, its plant is a *convolvulus*, and bears heart-shaped leaves, and small berries. The mechoachàn is well calculated for gently purging infants; for the powder to which the root is reduced has no taste, and looks like flour.

SASSAFRÀS.

The tree sassafràs, which is very common throughout the whole of America, may be commended for its beauty, as well as its salubrity. The trunk is perfectly straight and plain, to the length of about thirty feet, when the top unfolds into branches, and leaves. Not only the wood of this tree, but also the bark and root smell very strong of fennel, which keeps off decay and rottenness. Like santalum it is of a dusky yellow colour, and has a sharp aromatic taste, and a pleasant smell. Druggists should examine carefully that the wood of the red fir,

boiled in fennel, may not be palmed upon them by foreign traders for the real wood. There is also another kind of sassafràs, which has leaves like those of a laurel, and bears an odoriferous and blackish fruit. The bark is of a darkish red colour. This other species is said to possess the same virtue as the former, in provoking perspiration, and urine, in healing maladies arising from cold, syphilis, obstructions in the bowels, disorders in the womb, &c. The apeterebî, a tree common in the North of Paraguay, is also thought by some to be a species of sassafràs.

HOLY WOOD.

The tree called holy wood is very broad, but not very lofty. It has little and almost round leaves, two of which proceed from single stalks, and are indented at the top. It bears yellow flowers, which grow either single or two together, at the extremity or in the middle of the boughs. The wood is exceedingly hard, and will last almost for ever, even under water. The pith is of a lead colour. The rosin which exudes from this tree is bitter, aromatic, and said to possess equal medicinal properties with the wood: it, as well as the gum, is reduced to a powder which the Paraguayrians drink in cold water, as a cure for dysentery. For what dis-

orders, and in what manner this salutary wood is to be used, it is not my province to explain. This tree does not grow in the South of Paraguay, but in the North, where the Abipones and Mocobios dwell; it is also found in some parts of upper Tucuman.

THE GUAYACÀN.

It is a great mistake to suppose that holy wood, and guayacàn are the same; for though the wood of both possess the same power of healing almost any disease, yet the two trees differ as much in form as in name: for the guayacàn is loftier than the other, and almost resembles a nut-tree. It abounds in boughs, and bears small hard leaves. The flowers are yellow and produce fruit full of seeds. The blacker the pith of the tree is the more it abounds in rosin. The bark of this tree is hard, resinous, and composed of several little skins, spotted with grey on the outside, but within of a pale red: it has a bitter taste, but not an unpleasant smell, and is thought to be more efficacious in medicine than the wood itself.

THE ZUYÑANDỸ.

The zuyñandỹ, a large, lofty tree, consists of a soft wood, a thick bark turgid with copious moisture, and red flowers which seem to be

composed of one large expanded leaf, as soft as silk. The bark, when stripped of the rough outer skin, and properly ground, is of much efficacy in healing wounds inflicted by the teeth or claws of a tiger.

THE ZAMUÛ.

The zamuû is ridiculous both in name and form; for the Spaniards call it *palo borracho*, the drunken tree. It is lofty. It has a trunk surrounded with largish thorns, and bears middle-sized flowers of a beautiful red colour, but is of very singular appearance in other respects. For the highest and lowest parts of the trunk are small, while the middle swells out to a great width, like a barrel: on which account its very soft wood is easily made into tubs, and barrels. The farther this tree grows from rivers the wider it swells, so great is its dislike to water. It bears a round fruit like certain large gourds, with a very strong rind, which fruit, when ripe, bursts open and discovers woolly flakes, like cotton, and softer than silk, but with so short a fibre that it is very difficult to draw them out into a thread. The thorns of this tree when bruised to powder, and boiled, tinge the water with a red colour which is said to cure sore eyes.

THE MANGAỸ.

The mangaỹ is about the size of a cherry-tree, and bears white flowers, which exhale a very delightful odour. It produces fruit of a golden colour, and equal in size to a large plum, which, when ripe, are agreeable to the taste, but hurtful to the stomach. Both the tree and the fruit overflow with a kind of milky, and resinous juice, called mangaỹci, in the Guarany tongue, which streams out plentifully, when you cut the bark, and is caught by the hand, or by a board. The air curdles it, and gives it the appearance of a little skin. In this state, it is rolled up into balls, which are so remarkably elastic, that when thrown lightly upon the ground they leap up very high in the air. This liquor, mangaỹci, is said to be very useful in cases of dysentery. It is much to be lamented that so very few take the trouble to collect this rosin, which would be useful in Europe in various ways.

DRAGON'S-BLOOD.

The tree caà verà, which produces the dragon's-blood, is middle-sized both as to height and bulk. Some botanists call these trees *palmæ pruniferæ foliis jaccæ*, but in my opinion they have no affinity whatever with palms.

When a deep incision is made into their trunks, a kind of juice flows from them, resembling blood in colour and consistence, and which, when boiled on the fire, condenses into a liver-coloured rosin. Physicians complain that foreign traders sell them goat's-blood, bolo, or red Brazil wood, mixed with gum arabic, for dragon's-blood.

THE CUPAŸ.

The Paraguayrian trees, though they offer their fruits spontaneously to the natives, do not yield the oil, with which they are impregnated, without being cut. Amongst these is the cupaÿ, a large, tall tree, remarkable for its leaves, which are half a foot long, with red nerves and veins. Besides the wood, which is of a dark red colour, hard, and fit for carpenter's work, it affords a fruit which is dusky on the surface, but has a kernel resembling a walnut in size and form, and which is reckoned eatable by the Indians, and a dainty by the apes. But this tree owes its celebrity and value to the excellent oil with which it teems. To extract this most useful juice both arms, and arts are requisite. The trunk of the tree, which should neither be very old, nor too young, is cut to the pith with a knife. Soon after the incision is made, you will hear a slight

crackling, caused by the oil flowing from the top and from the boughs: for the warm air, insinuating itself more freely into the pores of the wounded tree, seems to rarefy and liquidate the oil, which is naturally resinous and thick. To effect this sooner and with more certainty apply dry burning boughs to the opposite side of the tree into which the incision has been made; by their heat, the oil is more dispersed amongst the fibres of the tree, and more liquefied, which causes it to flow freely into the vessel placed beneath the trunk. Within a few hours you will find a jug full of oil. If you wish to fill many jugs cut many of these trees, which are most abundant in the northern woods of Paraguay; there are none, or very few, elsewhere. This operation must be performed in spring, in the month of September, when the moon is at full; if you undertake it in the absence of the moon, in winter, or summer, you will lose your labour. This oil, in colour, could not be distinguished from water; it has a bitter taste, exhales an odour neither sweet nor the contrary, and is useful both to painters and physicians. I will now make you acquainted with its virtues, which I learnt from others, but never tried myself. When warmed and applied to a wound, it is said to stop the flowing of the blood, and to heal the wounded person

very speedily. It will cure the bites of serpents, and remove scars. Placed by way of plaster on the breast, it eases languor in the stomach; when applied to the belly, it assuages colic, and pains arising from cold. Two or three drops, swallowed with a boiled egg, will remove dysentery, and other hurtful fluxions, restore the tone to the bowels, and impart strength. Sometimes it is used as an injection with sugar from plaintain water, or oil of roses. From the oil of the cupaÿ the Brazilians make the balsam cupaÿba, of such high repute in Europe, especially the inhabitants of the province of Maranham, which abounds in those trees. But other rosins, chiefly that from the tree ybirapayè, of which we shall speak hereafter, are mixed with this balsam, as the singular fragrance of the smell discovers. American as well as European painters derive much benefit from the oil of the cupaÿ, for when mixed with garlick, it brightens pictures better than any varnish, and will never be obscured by time, if mixed with the colours instead of linseed oil. In wooden images, particularly, nothing is better for painting the face, hands, and every thing of flesh, of a natural colour. I can scarce persuade myself that the oil of the cupaÿ is brought quite pure from America to our shops; and that merchants do not adul-

terate it to increase the weight. There are three trees in Paraguay, all materially different, but much alike in name; I mean the *cupaÿ, the curupaÿ,* and the *curupicaÿ.* The curupaÿ affords bark like that of the çevil, which the Indians use to dress ox-hides with. To give them a red colour they mix the bark of the curupaÿ with that of another tree, (the caatigua, which the Abipones call achitè.) The curupicaÿ, a tree not larger nor harder than the elder, has a spungy kind of wood, unfit for any purpose, that I know of, which at the slightest touch, sheds a milky juice commonly thought to be poisonous.

PIÑON DEL PARAGUAY, OR THE CATHARTIC NUT.

This is a shrub resembling the fig tree of our country, in its leaves, its form, and the softness of its wood. The trunk and leaves, when pressed with the hand distil a milky juice abounding in serum. It bears fruit like dark walnuts, beneath the hard black rind of which lie three white kernels, covered with a white membrane and divided into as many separate compartments; in sweetness, and in shape they resemble almonds. These kernels, *piñones del Paraguay,* or piny nuts of Paraguay, are called by physicians, cathartic nuts, *ricini Americani,*

or purging beans; for two or three kernels, which many say ought to be first stripped of their white skin, then bruised in wine, and roasted a little on the fire, to mitigate their purging qualities, when eaten, will cause vomiting, purge the bowels, and expel noxious humours. Whether these nuts are sold in the druggists' shops in Europe, and whether physicians prescribe the use of them, I do not know. This is certain, that they must be taken cautiously, and with regard to the strength of the sick person. A branch of this tree, when cut and committed to the earth, soon takes root, and grows up very quickly.

THE VAYNILLA.

The vaynilla, a sweet name to those who love chocolate, is a creeping plant which grows in moist places, and entwines itself with certain palm trees, which serve it for a prop. It bears large leaves about a hand long, and small white flowers. Like pulse, for fruit it bears little hulls, or sheaths, a quarter of an ell long, triangular, and when ripe dark on the surface, and of a bright colour; they have a most delicious odour, and are full of very small seeds, like figs. Of these seeds the Indian women make rosaries to adorn their necks with: the savages formerly knew no other use of the vaynilla, which

however birds and apes eagerly devour. The little bag or sheath, in which the fruit is inclosed, occasioned the Spaniards to give it the name of vaynilla. The description of this plant, which became extremely profitable to the Americans after the discovery of the use of chocolate, I owe to Father Joseph Sanchez, who had travelled over the land of the Chiquitos, where that fruit grows, as well as in Peru and elsewhere. For this plant grows in no other part of Paraguay that I am acquainted with, which must be attributed to the inhabitants, not to the climate, as it doubtless would grow in the northern parts of Paraguay, were it cultivated there.

THE CACAÒ.

With the vaynilla we must speak of the cacaò, which is produced by a tree resembling an orange tree in its leaves, but larger, and having a kind of crown on the top. It bears a fruit like large melons, containing oily kernels, as big as almonds, and separated from one another by a white and very sweet skin, as by a kind of fence. The Peruvian Indians, throwing away the kernels which they did not then know how to use in preparing chocolate, were accustomed to chew and suck the little skin only, which is sweeter than honey. These trees in their native woods grow to a great size, and cover the melons

which they bear so entirely with their immense leaves, that you cannot see them without standing close by. They never grow so large when planted in any other soil. In Peru, amongst the Mojos Indians, in Mexico, and other countries of America, the woods abound in this most profitable fruit: both the tree and the kernel, however, vary in different countries.

THE TAMARIND.

Tamarinds, which are very well known in European druggists' shops, are a species of plum, with a dark rind, rather acid, of an agreeable taste, and full of a number of beautiful kernels. Taken inwardly, after being steeped for some time in cold water, they conduce much to allay the most burning thirst, and gently to purge the bowels. They grow upon trees which resemble palms, and have boughs and leaves long enough to cover a number of men, and with their dark shade protect them from the heat of the sun. Tamarinds, which botanists call *dactyli acidi*, grow in the territories of the Chiquitos, and elsewhere, but are unknown to the other parts of Paraguay.

THE ROSIN ŸÇICA.

This Paraguayrian rosin is found at the roots of trees under ground, where it flows very co-

piously from them in the heat of the sun. The Guaranies use it not only for medicinal purposes, but also to tar ships with, when pitch is not to be had.

THE TREE ABATI TIMBABŸ.

The huge tree abati timbabÿ, in the heat of the sun, sheds a quantity of gum of a golden colour, and clear as the purest crystal, of which the lower orders of Spaniards and the wood Indians make crosses, ear-rings, and beads to hang round the neck, by the following method: they apply hollow moulds, made in the same form, of wood or reeds, to the trunk of the tree, and the gum flowing down into them is hardened by the air, and quickly assumes the shape of crosses, ear-rings, or beads, with admirable exactness; you would swear they were made of crystal. Although as fragile as glass, they can be melted by no moisture. Were European artisans in possession of this gum, they would make knots, buckles, and little images beautifully with it. Might it not possibly contain medicinal properties? No one has hitherto made trial of its virtues.

THE CEDAR.

The more northerly woods of Tucuman and Paraguay boast of innumerable lofty cedars,

which, having exceedingly tall, straight, and large trunks, afford excellent materials for ships, and all sorts of building, as they never feel decay, and last for ever, even under water. No tree which Paraguay produces makes longer or wider beams, which, as they are laboriously hewn, not by a water-machine, but by human hands with a saw, and conveyed in waggons from Tucuman full three hundred leagues, sell very high in the city of Buenos-Ayres, where no woods are to be seen, and whither they are brought from the distant forests of Asumpcion, after a two months' navigation on the river. In Tucuman, indeed, a German lay-brother of our order constructed a machine, by which the saw was moved to the cedars by water underneath the wheel, with a great saving of time and labour; but it was soon after removed and destroyed by the natives, who hate all innovation. Sometimes out of one cedar a very large boat is made, to pull which thirty rowers are hardly sufficient. I do not deny that the tree timboy̰ is made into shorter and slenderer planks and boats in Paraguay; but cedars hold the first place, as they excel in the width, height, and straightness of their trunk, in the docility of the materials, and their durability under water. There are two kinds of cedars in Paraguay; the wood of the one is beautifully red, that of the other rather palish; both, however, have a very sweet smell,

and in the heat of the sun shed great quantities of gum, which is sometimes white, sometimes red, but always transparent. We used it in the same manner as gum Arabic, to glue things together, and also for polishing; might it not be fit for various medicinal purposes? Water boiled with bits of cedar wood and drunk, is a remedy for extravasation in those that have been bruised by a violent blow, by a sudden fall from a horse or a tree; though in such cases, to accelerate the cure, an infusion of quinoa, a kind of pulse with a very small grain, should also be drunk. Others make plasters of the quinoa, after it has been pounded in a mortar, and boiled in water, and when applied to the wounded or bruised part, they dissipate noxious humours so soon as to exceed the expectation both of the physician and the patient. This pulse is also a very wholesome food.

THE AMERICAN PINE, CURIŸ.

The curiÿ resembles the European pine in its leaves and in its height, but exceeds it in the hardness of its wood, which is pale, with red veins. The knots and swellings particularly which grow on the Paraguayrian pine are almost as hard as a stone. Of these large knots the Guaranies turn rosaries and images of the saints very neatly. When placed by the fire,

the red rosin lurking in the veins of the wood is melted, so that they seem as if varnished with a beautiful red colour, and shine surprizingly.

THE ALFAROBA.

We are now come to a tree on many accounts worthy of particular note; the fruit of which is called by the Spaniards *alfaroba.* The American alfaroba differs in size, form, and colour from that which is commonly put to sale in Germany, and is called by the Spaniards *alfaroba de la Berberia;* for from Barbary it was brought by the Moors to Spain and Portugal, where, at this day, it grows in such abundance in the woods, without culture, that in those countries, during the winter season, it is given to oxen and mules for their daily fodder. The sheath of the Spanish alfaroba is rather wide, full of seeds, or large pebbles, and of a dusky colour, although its pulp is sweet and whitish. The sheaths or hulls of the Paraguayrian alfaroba, which are almost a span long, and the breadth of a man's thumb, are covered with a soft yellow skin; moreover the seed is smaller and softer, and they have a pleasanter taste. Of the many kinds of alfaroba which Paraguay produces, the most remarkable are those two which are distinguished by the names of the white and the black. It is chewed white and

dry, as it falls from the tree, and when pounded in a mortar, is either eaten, or drunk mixed with water, and fermented, by the Abipones and other savages. It is the employment of the women to gather it in the woods, carry it home on a horse, pound it in a mortar, and pour it, mixed with cold water, on a hide, which serves both for tub and drinking vessel, where, without addition of any thing else, in about twelve hours, it effervesces so much with its own natural heat, as to become at last, a sharp, sweet, and wholesome beverage. Immoderate use of it disorders both the head and feet, and still more the tongue; yet, when taken in moderation, it is a means of strengthening the constitution, and inducing uncommon longevity. Moreover horses, mules, and oxen are never fatter, or more robust than after feeding on the alfaroba, woods of which abound particularly in Chaco, and the territories of St. Iago, though not even the shadow of such a tree is to be seen in any other part of the immense tracts of Paraguay. The Guaranies, who, being distributed into thirty-two colonies, inhabit a vast extent of country, are destitute of this most wholesome fruit; neither did we ever think fit to plant the alfaroba, which grows so quickly, lest the Abipones, like the other Indans, should turn it to a bad use,

and that it should cause drinking-parties and intoxication. Moreover the seeds of the alfaroba, if carelessly scattered in any soil, will certainly, and quickly grow up into trees. The white alfaroba affords not only meat, drink, and medicine, but also excellent materials for building waggons, houses and ships: for its violet-coloured wood is docile, and extremely firm, even under water. The leaves of this tree are small; and from its little pale flowers grow seeds, inclosed in a pod. They ripen in the month of November, and last in the woods till March, or are gradually collected and preserved at home by provident persons.

The other species of alfaroba, which the Spaniards call the black, resembles the former in all respects, except that it is smaller and sweeter. Its dusky bark is covered with red spots. The pods, though agreeable to the palate from being extremely sweet, create a roughness in the tongue, if eaten raw too freely, and a difficulty in speaking. I write this on my own experience; for once in a long journey, happening to pluck some of that fruit as I rode along, I was suddenly deprived of the power of speech. Some hours' silence was both the disease and the remedy; the Spaniards who accompanied me being greatly amused at my taciturnity. This kind of alfa-

roba is more commonly used for food than for drink. Its hulls, when pounded in a mortar, are reduced to a flour, which, after being strained through a sieve, is thrown into a round wooden box, pressed with both hands, and, as it is naturally resinous, forms into bread of itself, and becomes as hard as a stone; for as it abounds in thick rosin, its own dust glues it together. These loaves, which are called *patay*, and are chiefly made in the colonies of St. Iago, and sent to other cities, are taken, not only as food, but as medicine, especially by Europeans labouring under stone or strangury. No one ever doubted that both the black and the white alfaroba, as they have a diuretic property, are of much use, whether taken in a solid or liquid state, to persons in a consumption, or labouring under diseases of the bladder. Some say that spirits of much efficacy in diseases of the kidneys, and in hectic fevers, might, by chemic art, be extracted from both the alfarobas. We must not pass by a third species of alfaroba, which appears little different from the acacia. It has very hard, dark, red wood, is clothed with the same sort of leaves as the other alfarobas, and bears small yellow flowers, growing in clusters, and exhaling an aromatic smell. The rind of the pods is thick and black. The seeds, inclosed in

the pods, are like pulse, but harder. The pods, with their pulp, are resinous, of a sharp, bitter taste, and fit neither to be eaten nor drunk. The fruit is used by the people of Cordoba, and St. Iago, to dye wood, and cotton of a black colour, with the addition of alum, and copperas. This tree exudes rosin like gum Arabic. To it you may add a fourth species of alfaroba, a small tree, the pods of which are of a dark red colour, and taste neither sweet nor bitter. Of this the natives make a potion which is remarkably sudorific, and which, according to Thomas Falconer, will cure many persons who, in Europe, could not be restored to health without the aid of salivation.

VARIOUS KINDS OF PALMS.

Palms alone would afford subject for a bulky volume, if the names, forms, properties, and uses of all the different species were to be described. Palms supply the Americans with meat, drink, medicine, arms, lodging, and clothing. Out of the numbers that I have seen in Paraguay, I will describe a few.

THE CARANDAŸ.

The tall palm, carandaÿ, expands its leaves like an open fan, and bears sweet dates, which are not disliked by Europeans even. The bark of the trunk, which is very hard, when cut with

an axe, and deprived of the pith, which consists of sharp thorns, is used to roof the houses in some cities, and even to build cottages with. If the palms be cut when the moon is in the wane, their bark will bear age. This also is certain, that the carandaỹ palms create the richest and most wholesome pasture for cattle; for the rain-water, flowing to the ground from their leaves, contracts a kind of saltness, which generates saliva, and is the best and most agreeable seasoning of the grass for beasts.

THE PINDÒ.

The pindò is a very lofty and common palm, with a rough, white bark. By way of wood it has a pulp as porous as a fungus, very light, and composed of threads extremely liable to catch fire. It produces dates which, after being pounded in a mortar, are either drunk with water, or eaten. The dates, falling from the trees, fill the woods, and, by their hardness, severely hurt the naked feet of the Indians. But though these palms are, in some respects, very annoying to travellers, yet in others they are equally convenient to them: for the Guaranies, when they pass the nights in the woods, are furnished by them, on an impending storm, with a protection against the rain. Some hew down any palms of this sort that they can find,

and with the soft spungy materials afforded by their trunks, quickly build a little hut, and cover it well with boughs and leaves of palms, bent partly one way, partly another: should the rain fall with the utmost violence, not a drop will penetrate this hasty fabric. Of the leaves of the pindò palms, cords, panniers, and baskets are sometimes woven, as of osiers in other places. These palms, not only by their great height, but also by the length of their boughs, which they gracefully extend, afford a pleasing spectacle to the eye, and a great ornament to gardens.

THE YATAŸ.

The yataŷ, a smaller palm, besides dates, yields a very tender germ, leafy at the top, as soft as butter, and of a yellowish white, which is eaten raw, as it is plucked from the tree, and is very pleasant to the taste. Crowds of parrots daily fly to feed upon the nuts of this palm.

THE YATAŸ GUAZÙ.

The yataŷ guazù, which has very large bright green leaves, and a rugged trunk, and is at least five ells high, produces oval shaped nuts, which the Spaniards call *coccos*. The pulp is very small in quantity, but, if boiled, eatable. In each nut there are three large kernels, as agreeable to the taste as almonds, but more oily.

THE MBOCAYAŸ.

The mbocayaÿ, a tree very abundant on hills, has its trunk and leaves armed with long and strong thorns. It bears bunches of smooth dates, as sweet as almonds, which are eaten either raw or roasted. Oil, almost like that of olives, may be expressed from these nuts. This palm puts out threads stronger than hemp, of which the savage nations make cords for bows, and lines for fishing with. In the territory of Cordoba you see palms, the leaves of which make such strong and commodious besoms, that they are brought to the more distant cities. The Spaniards of St. Iago, who go to the woods to seek wax and honey, cut certain palms to the pith. At the end of some weeks they return to the place, and in those palms they had wounded find very large fat worms, which they fry, and eat with much satisfaction.

FRUIT-BEARING TREES.

Many fruits which European trees produce are unknown to Paraguay: in all my travels through that country I never, or very rarely, saw any apples, pears, plums, cherries, filberts, chesnuts, &c. These trees seem not to suit the climate and soil of Paraguay; for they are either entirely barren, or produce such ridicu-

lous fruit as rather deserve the appellation of abortions of nature, than delicacies of the palate. The want of the fruits above-mentioned is amply compensated by an incredible abundance of very large peaches, quinces, pomegranates, citrons, both sweet and sour, and oranges which Europe might envy. In the neighbouring kingdoms of Chili, where, on account of the vicinity of the mountains, the air is much sharper, almost all European fruits, and many other native ones, succeed amazingly, and are dried and carried into other countries with great profit. But though Paraguay is destitute of various European fruits, she boasts of many native ones, unknown in Europe even by name. I shall cursorily describe trees and shrubs as they enter my head, without regard to order.

THE MISTOL.

The mistol, a very large tree, affords hard and heavy wood, of a red colour, fit for making pestles of mortars and spears; it also produces a red fruit, about the size of a chesnut, resembling in appearance the tree which the Spaniards call *azofaifa*, and druggists *jujubes*, and which was formerly brought from Africa to Spain and Italy. The skin is tender, the kernel rather large and hard, and the pulp fit for

food; a sweet drink, and even a kind of bread, being made of it, which is much liked by the Indians, but to my taste extremely insipid. The jujub is used by European physicians for allaying pains in the breast, cough, hoarseness and pleurisy: whether the Paraguayrian mistol possess the same virtues or no, I cannot tell.

THE CHAÑAR.

The tree chañar has a yellowish and very hard wood: the fruit supplies both meat and drink, and is dried and preserved by some.

THE YACANÈ.

The fruit of the yacanè tree is of a yellow colour, about as large as a middle-sized citron, and in taste like a rotten pear.

THE QUABŸRA GUAZÙ, AND THE QUABIYÙ.

The quabÿra guazù, which somewhat resembles a plum, and the quabiyù, which is more like a cherry, are used both as meat and drink. The quabÿra is very abundant, and much liked by the Indians; but was always nauseous to my taste, for it smells like a bug. Both the trees which produce these fruits afford very good wood for turning.

THE QUABŸRA MIRI.

The quabÿra miri, that is, the smaller quabÿra, differs totally from the former, and, in my opinion, exceeds all the other Paraguayrian fruits, both in sweetness, and salubrity. It is a little apple, resembling a medlar in size, and form, and covered with a hardish skin, which is green at first, and when ripe becomes a dark red. The pulp, which is full of tender seeds, pleases the palate with an agreeable taste, between sweet and sourish, and exhales a fragrant, balsamic odour, with which the bark and leaves are likewise scented. It is a remarkable circumstance that this fruit, though naturally hot, is never prejudicial, however freely it be eaten. The quabÿra miri grows on shrubs like the junipers of Austria; they are supported by a slender stalk, but have a number of knotty, thick roots, spreading far and wide in the earth. They grow no where but in sandy soils, destitute of good grass. The quabÿra miri is to be seen in every part of the plains of Taruma, of the lands near the little city Curuquati, and of the territories of St. Paulo, bordering on Brazil. But in those tracts of land where this fruit abounds, you find the pastures particularly poor, either from the grass being

choked by the sand, or because these shrubs suck up the best juices of the earth. Certainly in the rest of Paraguay, where richer turf is found, I never beheld any thing the least like a quabỹra mifi. I should not be silent on the other use of this plant; in its little branches the ants make a wax whiter than milk, and fragrant as the most delightful balsam; it consists of very small, white grains, scattered up and down the shrub, which are laboriously collected by women, melted at the fire, and made into candles, for the use of the churches, where, when lighted, they exhale a very sweet odour. It is much to be lamented that this wax, though excellent in other respects, wants hardness; for the candles made of it melt quickly, and are consumed in a short time. To render them more durable, I have often mixed common bees' wax with the wax of ants.

LA GRANADILLA, OR THE PASSION FLOWER.

The first claim to our notice after these belongs to a most wholesome fruit, which the Spaniards call la granadilla. It grows in great abundance in the plain, at all seasons of the year, on a shrub which clings, like ivy, to hedges and bushes. There are many species of it, differing only in form and colour. They

all bear a middle-sized apple, of a golden colour spotted with red, in taste between sweet and acid, with an agreeable odour, and full of round, black seeds. Whether eaten raw, or boiled with sugar, like citrons, and drunk mixed with cold water, it is extremely salubrious. Its sweet juice conduces much to strengthen the bowels, and without danger to cool the limbs, after they have been heated by the sun. If you attentively examine the beautiful flower of this plant, you will find the scourge, the crown, the nails, the cross, the pillar, the dice, the gall, and all the other instruments belonging to the passion of our Lord, plainly figured there.

On this account it universally goes by the name of the passion flower, and was thought worthy to be brought from America to Rome, in the time of Paul V.

THE GUEMBÈ.

The fruit guembè is the more remarkable for its being so little known, even by many who have grown old in Paraguay; for the northern woods only of that country are its native soil. It is about a span long, almost cylindrical in shape, being thicker than a man's fist in the middle, but smaller at both extremities, and resembles a pigeon stripped of its

feathers, sometimes weighing as much as two pounds. It is entirely covered with a soft yellowish skin, marked with little knobs, and a dark spot in the middle. Its liquid pulp has a very sweet taste, but is full of tender thorns, perceivable by the palate only, not by the eye, on which account it must not be slowly chewed, but quickly swallowed: for if any one were leisurely to bruise the pulp with his teeth, his tongue would be made to smart for a long time by the latent thorns, and would be rendered less ready in speaking. The stalk, which occupies the middle, has something of wood in it, and must be thrown away. You cannot imagine how agreeable and wholesome this fruit is, and how it refreshes a man fatigued with long walking and bathed in perspiration. This ponderous fruit grows on a flexible shrub resembling a rope, which entwines itself round high trees. How great must be the strength of the *guembepi*, as the Guaranies call it, you may infer from this, that the stoutest Indians, when they cut a high tree for the sake of getting honey, sit for a long time with safety upon this shrub, which is entwined about the boughs and trunk. From the above-mentioned guembepi the Spaniards and Portugueze sometimes weave cables stronger than hempen ones.

THE TATAYŸ, A MULBERRY TREE.

The tatayÿ, a tall, large tree, bears mulberries, resembling those of our country in taste, and form, but larger, and of a yellow colour. The saffron-coloured wood of this tree is very hard, but docile, and of it the Indians make beautiful boxes, pipes, trumpets, and other things, as Europeans do of box. Pieces of the same wood, boiled with alum, are used for dying wool, and cotton, of a yellow colour.

MAMMONES.

Mammones, fruit about the size of a quince, sometimes larger, and when ripe of a greenish yellow, grow upon the trunk of the tree, and hanging by short stems, have the appearance of teats, whence they are named. Their pulp resembles that of melons, in its taste and yellow colour, and is sometimes eaten raw, or boiled with meat. The tree is of middling height and thickness, and resembles a walnut, in its dusky bark, and a fig-tree, in its large, angular leaves. Its weak wood swells with a milky, insipid liquor, which is an additional reason for the name of *mammones* being given it. This tree bears flowers, and fruit, at all seasons of the year, but is so much exhausted by this exceeding fertility that it scarce ever

lasts above four years. When fresh planted it bears fruit the first year. There are two species of this tree, whereof the one is called the male, the other the female. In some respects they differ, but it is not true that one would be barren without the other. Mammones, though abundant in Brazil, and other parts of America, are very rare in Paraguay, and scarce ever seen there except in gardens.

THE ALABAS.

A shrub, or more properly, a low thorny thistle, delighting in a sandy soil, produces the alabas, round apples, about the size of a hen's egg, concealing beneath a thick, pliant bark, defended by sharp, but very slender thorns, a liquid pulp, which is sometimes redder than blood, sometimes whiter than milk; abounds in soft black seeds; delights the palate with its delicious flavour; and greatly refreshes the body, when heated by the sun. Assuredly this fruit, were it found in Europe, would be ranked amongst the delicacies of the desert. It grows very common in some parts of Paraguay, but is rarely seen in others.

THE AGUAŸ.

The aguaÿ, an immense tree, produces fruit like plums, which on account of the acidity of

their juice, are oftener, and more safely eaten, after being boiled in water. There is another tree which resembles this in name, but is totally different in form and other respects.

THE ANGUAÝ, OR YBIÎRAPAYÈ.

The anguaý, a tree of uncommon height, and thickness, affords wood fit for carpenters' work, hard, red, and remarkably fragrant. By way of fruit, it bears hard seeds, like almonds, which are also used in medicine. The stones of this fruit are triangular-shaped, of a violet colour, and so bright that the Indian women make necklaces of them. The rosin which distils from the anguaý is exceedingly fragrant, and of sovereign virtue. The famous Peruvian and Brazilian balsam is made of this rosin mixed with the oil of the cupaý tree, and others; it is also used in churches instead of frankincense, which it greatly exceeds in sweetness. The bark of the tree, being impregnated with rosin, is used for the same purpose. The tree is named *anguaý*, because mortars are generally made of it by the Guaranies, in whose language it is also called *ybiîra payè*, the conjuror's tree; for the savage jugglers, whenever they expected to be visited, and consulted by their countrymen, used to

perfume their huts, by burning this rosin, that they might seem to breathe of something divine.

THE ŸBA POROYTŸ.

The ÿba poroytÿ is a small pome, resembling a cherry, with a pleasant, but rather acid flavour. Of the tree balsam is made.

THE TARUMAŸ.

The fruit of the tarumaÿ somewhat resembles an olive, though extremely dissimilar in taste. From the abundance of these trees, the territory, wherein we placed the town of St. Joachim, was called Taruma by the Spaniards, and Indians; none of whom are very fond of this fruit.

THE GUAYÁBA.

The tree guayába produces kinds of pears of an oval shape, and full of grains. The surface of them, when they are ripe, is yellow, the pulp red. They are both pleasant and wholesome when boiled with sugar. Dressed unripe they are very efficacious in strengthening the bowels, and possess an astringent quality. This tree flourishes even in soils that are not very rich.

THE VINÀL.

The vinàl, a tolerably large tree, is clothed

with leaves like those of the olive, but broader. It bears sweet pods, of which a beverage is prepared. The tree is covered with very sharp and strong thorns, a span in length, and so virulent, that whoever is pricked by them finds it a matter both of pain and danger. But the same tree also affords a medicine; for the juice expressed from its leaves, after they have been pounded, is said to cure complaints in the eyes, especially when they are afflicted with noxious humours.

THE YBIÎRA YEPIRÔ.

Of the ybiîra yepirô a balsam is prepared, but for what purpose intended I do not know.

THE CAAÝCÝ.

The caaýcý, which some say is a species of mastic, yields a transparent, sweet-scented rosin.

THE AGUARIBAÝ.

Of the shrub aguaribaý, which is likewise thought to be a species of mastic, a balsam of much service in cleansing and healing wounds is made. Taken inwardly it greatly conduces to stop flowing of the blood, and allay coughs.

THE MOLLE.

The molle, a tree of no obscure name, fur-

nishes solid wood for building, but liable to be moth-eaten. It is adorned with leaves, like those of a laurel, which, when bruised, serve for dressing goats'-skins, and for medicinal purposes. The trunk distils a quantity of very fragrant gum, which is burnt instead of frankincense. It bears fruit of a black colour, the rind of which, when unripe, is of a pale blue. This fruit is boiled in water, and, being sweeter than the alfaroba, makes a sharp and sweet syrup, which, mixed with water, affords a pleasant, but powerful drink. This liquor imparts a sort of ferocity to the eyes of persons intoxicated with it, which continues two days. Physicians use both the boughs and the rosin of this tree for various medicinal purposes.

THE BACOBA AND BANANÀ.

The fruits bacoba and bananà, which the Indians delight greatly in, belong to the fig species. They are oval-shaped, and of a red colour. The shrubs which produce them have neither seed, nor boughs, but are adorned with long, wide, and beautifully green leaves, from the midst of which the germen and the fruit emerge. The trunk or stalk of these shrubs is slender and fragile. They die after bearing fruit once, but are compensated for by suckers which grow from their roots. The fruit of the

bananà is rather long, and square in form, with a saffron-coloured skin, a soft pulp, and not a very rich, but rather cold juice, which, unless quite ripe, is injurious to the stomach. The bacoba is, therefore, more wholesome than the bananà; both fruits, however, when properly used, are remedies for various complaints. A liquor expressed from them causes intoxication when taken in excess. Both trees, though they grow in very sterile soils, bear fruit all the year round.

THE ANANÀS, OR PIÑA DEL PARAGUAY.

The anana is called by the native Spaniards *piña del Paraguay*, from a sort of resemblance to the nuts of the pine, and from its being very abundant in the north of Paraguay. I observed that those of Paraguay were larger than those of Europe, but not so sweet. The juice of the former is as pleasant as that of strawberries to the taste; but, unless perfectly ripe, sharp and caustic; on which account this fruit, when cut into stocks, according to its length, must first be macerated in rich wine. The liquor of it, when expressed by the aid of fire, removes languor from the mind, and nausea from the stomach, relieves dysury, and nephritic pains, and restores the natural heat to the aged. Some preserve ananàs in sugar. Each plant

yearly produces one fruit, and becoming exhausted, gradually dies away; whilst, in its place, a little plant, taken from the crown of the ripe fruit, is placed in the ground, and next year bears fruit. This also is the case when it grows wild without cultivation; for the new germ falls from the top of the plant, and takes root.

THE MANDIOC.

The mandioc is the root of the little plant mandiò, which is about the height of a middle-sized man. It is supported by a very straight, slender trunk, the thickness of a man's thumb, knotty like a reed, with bark resembling that of a hazle, and pith, spungy, like the elder's, and full of milk. At the top it is crowned with branches and little boughs, with elegant, long, narrow leaves, of a beautiful green colour. The flowers are yellow. The want of fruit is compensated by the roots, which are sometimes three feet long, fragile, thicker than a man's arm, and covered with a dusky skin like the bark of a hazle. Their very white pith is full of a milky, glutinous, and poisonous liquid. As in the cinnamon shrub the bark is alone made use of; so in the mandiò, the root is the only serviceable part. The Americans are acquainted with more than twenty species of this

tree, differing in form and virtues. The mandió bears seed not unlike that of the piñon del Paraguay; but it is quite useless in propagating the plant, for which purpose the trunk or stalk of the shrub is cut into stocks, about a span long, three of which are always stuck into heaps of mould, so that they project about the length of a span from the surface of the earth. In a short time they take root, put out leaves, and grow up. Neither do they require to be watered, for this plant detests moisture and shade, and loves dry soils, and sunny situations. It must be planted in the summer, in ground that has been well dried. Six months after it has been laid in the earth, you will find roots fit for eating; but in reality it is a year before they are fully mature, and attain to their ordinary size; at the end of which time, although they be not dug up, they will remain a long while under ground uninjured, but if taken out of the earth, grow rotten in the space of three days. The roots, therefore, should be carefully cleansed without delay, the little skin being first stripped off them; they should then be cut into small pieces, and laid upon the floor to dry for two days. After being pounded in a mortar, they are reduced to flour, and made into bread baked in various shapes, which, though wholesome, is relished by none but

persons unacquainted with the taste of wheat. These American loaves are round, flat, and rather hard, like the bark of the cork tree. They look like those cakes made of flour and honey in Germany, but are devoid of all taste. In other places they squeeze a juice from the roots of the mandiò, which, when left in a vessel for two hours, deposits a white settlement at the bottom. This, when dried, is made into flour, and that into small cakes, balls, and other things. The same juice is boiled on the fire, and makes a kind of paste, which is not only used as victuals, but likewise for starch to stiffen clothes with, and sometimes for glue to fasten paper together. There is another kind of mandiò, the roots of which, after being softened by lying for some days in water, are roasted on the ashes, and eaten without prejudice. It would take up a long time to relate all the different methods by which the mandioc is converted into meat, drink, and medicine, mixed with butter, barley, and sugar. Happy are the Americans who can deceive and appease their stomachs by so many artifices! For my part, though I have often, in travelling, been exceedingly hungry, I could never prevail upon myself to satisfy the cravings of appetite with the mandioc, in whatever way it were dressed. If the Americans like it, that is

sufficient: *haud equidem invideo, miror magis.* I confess, however, that the root of the mandioc properly cleaned, and eaten plain with boiled beef, was by no means disagreeable to me. I never doubted either that these roots, when prepared in other ways, though insipid to Europeans, create good blood and juices; for, to omit other arguments, the American mothers, whenever they find their milk fail, after recruiting themselves with boiled mandioc, find their breasts filled, which a little while ago were quite exhausted. The Portugueze in Brazil perform arduous journeys of many months, on foot, through immense wilds, furnished generally with no other provision than the flour of the mandioc. The Portugueze sailors also, when they are detained many months in the Brazilian ports, and when they sail back to their native land, feed principally upon the mandioc, and most part of the natives do the same; for as the continual rain prevents the cultivation of wheat, the higher ranks only eat wheaten bread, the flour being conveyed at a great expense from Lisbon. The North Americans also greatly esteem, and carefully cultivate the mandioc. The Brazilian and Paraguayrian Indians account this plant one of the greatest blessings of Providence, as being frequently the only support of life; for al-

though locusts, ants, or a long drought, should entirely destroy maize, pot-herbs, pulse, melons, and fruits; the mandioc alone, surviving under ground, would supply the place of all these things; for when the boughs, and leaves of this tree are, by some means, destroyed, the roots flourish, increase, and remain uninjured. Drought, which destroys other plants, is favourable and salutary to this. But now the resemblance of the name admonishes me to pass from the esculent mandiò, to the woolly mandiyù.

THE MANDIYÙ, COTTON.

As the mandiò is very serviceable in feeding the Americans, the mandiyù does much towards clothing them. It is produced by shrubs scarce larger than a hazel of our country, with wood and bark like the elder, and clothed with plenty of soft, woolly leaves. Between three small leaves, with which the unripe nuts are surrounded, grow flowers larger than roses, composed of five broad yellow petals, streaked with red: yellow stamens grow in the bottom of the flowers. The blossoms at length become fruit of a green colour, oval-shaped, or rather conical, and when full grown larger than a plum. When ripe it turns black, and

separates into three parts, thrusting out white cotton, full of black seeds, resembling pistachio nuts in size and shape. Under the black skin of these seeds is concealed a yellowish white pith, of a sweet taste, very oily, and of much use in allaying cough and difficulty of respiration. The oil expressed from them is said to be efficacious in cases of stone and in cutaneous disorders. Cotton itself, when burnt, will stop the flowing of blood. As the cotton gradually ripens and bursts from its prison, it is not gathered all at once, but collected day by day. In the Guarany towns this is the business of the girls, who walk about the field, and pluck the fruit with a gentle hand, that the shrubs may not be injured. The cotton daily collected is spread on hides in the court-yard of the house, and laid out in the sun to dry. If this be properly attended to, it may either be safely kept for years in a leathern bag, or spun into thread as soon as you like. To extract those seeds from the cotton the women make use of a wooden machine, consisting of a couple of cylinders, the thickness of two fingers, into which they insert the cotton, and, twisting it about with their hands, cause the seeds to fall out of themselves; because, as they are thicker than the space between the cylinders, they are squeezed out by them.

Some parts of Paraguay produce yellow cotton, but this is very uncommon; for in every other place throughout the country the cotton is as white as snow, and grows on shrubs which are reared from seed sown in little plots of ground, and yield fruit many years. If any plant withers, or grows old, fresh seed is sown, and another succeeds which bears fruit the first year. Cotton loves a sunny elevated situation, exposed to the winds on every side, and full of stones. However favourable the soil may naturally be to the production of cotton, it always requires exquisite culture. It must be ploughed, and weeded over and over again, to clear it of thistles, tares, and grass. The furrows and ditches, into each of which three or four fresh cotton seeds are placed, must be dug in a right line, and at such a distance from one another that the oxen and ploughmen may have room to pass through the intermediate spaces. The same field, indeed, must be fresh ploughed every year, and, at the approach of spring, the plants, which have been stripped of their leaves in the winter, are cut like vines, and quickly covered with new foliage. The poorer sort amongst the Spaniards of Paraguay wear cotton shirts; the richer, linen ones. They prefer paying an inordinate price for linen webs

brought from Europe to the trouble of cultivating flax.

RICE.

During the first years that I spent in Paraguay, rice was so scarce that, as it was brought from other countries, it hardly ever appeared at our table. It was never sown, and none would go of their own accord to gather or carry away rice, which grows at a great distance on the northern shores of the Paraguay; justly fearing the Payaguas, who infested those places. Instructed, at length, by the Portugueze Brazilians, we began to sow rice, and the crop was more than could be consumed. But as it is very difficult to take the grains of rice out of the ear, the Indians preferred eating maize, which is pounded in mortars with little trouble. Let no one entertain a notion that the sowing and cultivation of rice require any particular artifices; for it is sown and reaped exactly in the same manner as European wheat, with this difference only, that the seeds must be committed to the earth at the commencement of spring, and in a moist situation. Many have affirmed positively that rice will only grow in marshy places; but we found that which was sown in woods, or rather in

ground that had formerly been wooded, to yield a more abundant harvest than what was sown in a marshy situation. For a place that has been previously occupied by trees, retains, for a long time, its native humidity, and the ashes of the trees that have been cut down and burnt on the spot, incredibly fertilize the soil. In places of this kind the Guaranies used to sow tobacco, maize, and most other things except cotton, with great success. But, good heavens! how have I lost myself in this labyrinth of trees, shrubs, and plants! I shall hardly be able to find my way out of the wood; yet it is best to tarry there awhile till, after having described the medicinal trees, I have enumerated all the rest which are useful in building, or on other accounts worthy of note.

THE TAYŸ, OR URUNDEŸ QUEBRACHO.

The tayÿ, or tajibo, and the urundeÿ quebracho, either of a red, or pale colour, excel in hardness and size; both trees are called by the Spaniards *quebracho*, or *quebrahacho*, because, unless dexterously cut by a skilful woodman, or carpenter, they break the axe at the first blow, being as hard as iron; for *hacha* means an axe, and *quebrar* to break. The quebracho colorado, when covered with its bark, is red.

As soon as it is cut down and worked upon, the rosin in which it abounds is melted by the hot air, and flowing to the exterior parts of the wood, gives it a red hue, and causes it to shine like porphyry. The Guaranies burn pieces of the tree tayỹ, receive the smoke or soot arising from them into a clean dish, and by pouring hot water upon it, convert it into ink, which, mixed with gum and sugar, is by no means to be despised.

THE LAPACHO.

The lapacho is remarkable for the hardness and heaviness of its wood, and is particularly useful in making the mills for squeezing the sugar cane, olives, and other things, and also for wheels of waggons.

THE VIRARÒ.

The virarò affords white, not very hard, but extremely durable materials.

THE ESPINILLO.

The espinillo has very strong wood, but its indocility renders it fitter for the fire than for carpenter's work.

THE NETERGE.

Of the pith of the neterge very strong spears

or pikes are made. This tree is remarkable for the width and height of its trunk. Its leaves, which are like oblong thorns, point towards the ground. For fruit, it bears pods or bags, which are about a span long, and have a balsamic odour. The pith of this tree equals iron in hardness, and is of a violet colour, which however changes to black, after the spears made of this wood have been rubbed some time by the hand.

THE ỸBARÔ.

The large tree ỹbarô bears black, shining berries, about the size of filberds, which are pierced in the middle, and made into rosaries.

THE ÇEVIL.

The çevil produces bark for dressing hides, together with certain pods, which the savage Indians used formerly to burn, inhaling the smoke into their mouth, nose, and whole body, which rendered them drunk, mad, and for some time furious.

THE SEIBO.

The seibo, a middle-sized tree, adorned with violet-coloured leaves, consists of crooked boughs, and a spungy wood, as soft as that of the cork tree, so that, when fresh, it may be cut with a knife like an apple; but after it is dry,

axes are not sufficient to hew it. A bough of this tree fixed in the ground takes root, and grows immediately. Whenever the tiger feels his claws burn, he is said to rub them against the bark of this tree to relieve the pain.

PALO DE-LECHE.

This tree is called *palo de leche*, the milky tree, by the Spaniards, because its wood is white as milk, and so soft that it may be cut with a common knife, and is used for small carpenters work.

THE ŸÇAPŸ.

The ÿçapÿ, a large tall tree, is covered with leaves like those of the citron, but smaller, and of a paler green. It is a remarkable circumstance, that when the air is mild, and always in the night, its leaves drop a quantity of water, which moistens the space round about the tree and renders it muddy. The wood of the tree is very soft and flexible, but not moist, on which account it is well calculated for making stirrups. John Verkens of Leipzig, in his account of a journey taken by the Dutch to the East Indies, relates, that in the island of Ferro, one of the Canaries, they found a very large tree which dropped water day and night, every part of the year, and that the inhabitants hung up large

pitchers to receive it for their own use, and that of their cattle; fresh water, he says, being incredibly scarce there. If this be true, I suspect that it must be the same tree as that which the Guaranies call ỹçapỹ in Paraguay. They say that this water possesses a medicinal virtue, but of what kind I do not know.

THE TREE OF ANTS.

This is called *arbol de hormigas*, the tree of ants. It consists of a weak spungy wood. The whole tree is full of holes like a sieve, and being covered with ants, should be avoided by all passers by; for if you do but touch the tree, a host of ants rush out of their lurking-holes, and will cover both you and the tree itself.

THE UMBÙ.

So wide are the boughs and trunk of this tree, that the sun never sees its foot. It affords plenty of shade to fifty persons seated beneath it, and completely defends them against the rain. The linden trees of Europe are mere dwarfs compared with an aged umbù.

THE WILLOW.

The willow, though it covers the islands of the Parana, and the banks of certain rivers, is not to be seen elsewhere throughout a vast ex-

tent of country. The wood and leaves of willows, used both medicinally and for other purposes, were often vainly sought by us.

THE AMBAŸ.

The ambaÿ, a kind of wild fig, grows pretty high in the course of a few months. The body of the tree is slender, and perforated like an elder; the bark such as is peculiar to figs; and the wood white like that of a birch, but so soft that it may be cut with a knife. It has few boughs, but is adorned with very large leaves, for the lively verdure of which it is greatly commended, as well as for the salubrity of its bark, juice, and leaf, which, applied in various ways, stop running of the reins, too copious discharges, and looseness of the bowels.

THE WALNUT.

Walnuts, no ways differing from those of our own country, are very common in the woods of Tucuman, but scarce seen in other parts of Paraguay. Their wood is employed in making pistol-cases, handles, and for other kinds of cabinet-maker's work. The nuts are of different sorts, for some are very large, with a soft rind, others quite dwarfish, and with rinds as hard as a stone.

THE URUCUŸ.

The urucuÿ, which is half shrub half tree, resembles a hazle in the whiteness of its wood, and the blackness of its bark. Its leaves are rather large, and heart-shaped. The flowers, which are composed of five white petals, tinged with red, are about the size of a common rose, but have no scent whatever. For fruit it bears pods, which are green at first, and afterwards red, each containing about forty grains the size of peas, but plain on both sides, and with a white pulp, like the seeds of apples. The surface of them is of a deep bright red, and immediately dies the hands of all who touch it with that colour. The pods, when ripe, burst open of themselves. These grains, either dry or fresh, supply the place of vermillion: when pounded, and sprinkled with water, they are used by the savages, sometimes for painting their bodies, sometimes for dying or staining cloth, vessels, or other things. This scarlet colour, when a thing is once tinctured with it, adheres pertinaciously, if the grains of the urucuÿ, steeped in water, be mixed with alum or urine. The same grains are thrown into boiling water, and of the colour that settles at the bottom cakes are made, which the women in Europe paint their faces with, and painters and dyers

use for other purposes. They are used also both as food and medicine, variously prepared and mixed. Of the bark some weave cables, cords, and ropes, stronger than hempen ones.

THE AÑIL, OR INDIGO.

That mass of blue colour which the Spaniards call añil, or añir, and other Europeans, indigo, is made of a plant, with a long slender root, branching out into a number of shoots; on which account its long stalks partly creep on the ground, and partly stand upright. They are red on one side, and are loaden with small boughs, and round leaves, about the size of one's little finger nail, of a dark green, on one side, and a silvery white on the other. The little blossoms of this plant are of a palish red, with flowers like a husk of corn, or as others explain it, like an open helmet: and are succeeded by pods, hanging from the stalk, full of an olive-coloured seed, very like rape seed. The leaves of the plant, when perfectly mature, are gathered in bundles, pounded in stone mortars in the first place, and next steeped, and turned about in a pan of tepid, or as others say, cold water. They use them poured out on a wooden table, surrounded with a high wooden brim, and hollowed here and there into ditches. After the water has escaped, the

thicker part of the colour settles into those ditches, coagulates, and hardens. The solid particles are then taken out, and dried for many days; for the dryer they are, the nearer they approach to that colour which we call Venetian blue. Those who dyed webs, or garments with that colour in Paraguay, mixed children's urine, instead of alum, with it, to prevent the colour from flying. The plant anil is sown in other places, and grows spontaneously in the plains of Paraguay, but is generally neglected, the industry of the inhibitants seldom answering to the liberality of nature. I never had the least doubt but this plant might be cultivated in those countries of Europe where the climate is milder. The seed must be sown in a soft, and well-tilled soil. The young plants must be removed, like lettuce, and cabbage, and placed at proper distances: great care must likewise be taken to prevent their being choked with weeds.

COCHINILLA.

The Paraguayrian cochineal is produced by winged insects, which sit continually on certain little thistles, and suck their juice. There are many kinds of these thistles, which differ from one another in their form, and fruit. The plant on which the cochineal is found, is called

tuna by the Spaniards, and *opuntia* by botanists. From a very short root rises a thick stalk, sometimes four-cornered, green, crooked, with a white fragile pulp, and covered with thorns: on this, instead of boughs and leaves, grow other stalks, the same as the former, very long, and extremely full of juice. Yellow flowers are succeeded by fruit of a red colour, larger than a common fig, with a sweet, and at the same time, rather acid flavour, which renders them very delightful to the palate. Their pulp is full of small, black seeds, like grape stones, and when peeled has a delicious taste. From these shrubs therefore, the women collect cochineal, which consists of very small, white, fluid particles, closely resembling moss. Most of the particles are made into small, round cakes, and, after exposure to the air, become red and hard. Nothing further is requisite to fit them for painting, and dying. The Jesuit priest of the Guarany town Nuestra Senhora de Sta. Fè, took care to have the tuna thistle planted in a large garden, that they might not be obliged to seek the cochineal necessary for his town in distant plains. When the thistles were grown up, those winged insects, resembling bugs, were carried by the Indians from the plain, and scattered up and down, with more than the desired success; for so abundant,

and so excellent was the cochineal collected from them, that it was anxiously bought, at any price, by the neighbouring priests, for the use of their towns; because it was of a deeper, and brighter red, than that of the plains, and the woods, and was, moreover, scented with citron juice. In succeeding years, the same Father prevented all access to the town by means of these thistles, that the equestrian savages, who had committed much carnage amongst them, might not be so easily able to approach it. This kind of living hedge, which the Spaniards use both in their gardens and estates, became not only a means of security, but at the same time, an ever fertile nursery of cochineal, which, as well as a most beautiful paint, affords the Paraguayrians a medicine for strengthening the heart, creating perspiration, and counteracting poison; so that it may be safely, and usefully mixed with vinegar, and other seasoning liquors.

GOLDEN-ROD.

Golden-rod, which has a very straight stalk crowded from top to bottom with leaves, is sometimes four, sometimes five feet high, and adorned with a bright, yellow flower, abounds in the plains of Paraguay. Both its trunk, and leaves, boiled in water, and mixed with alum,

afford painters, and dyers a most splendid yellow colour, and mixed with blue a very bright green. The same golden-rod is also of great, and various use amongst physicians. I remember a gentlewoman, who had been confined to her bed for years by some disease which baffled the skill of many physicians, being quickly, and happily cured, by a German, who prescribed the use of this medicine. There are many species of golden-rod, but I was acquainted with only one in Paraguay.

ROOTS OF A RED COLOUR.

The Guaranies in marshy places dig up roots called yzipò with a dusky surface, which they use to dye woollen, and cotton cloths of a dark red. Whether this root be the *rubia* of dyers I cannot venture to affirm, for though that plant is cultivated in Austria, I never happened to see it.

THE BARK CAATIGUÀ.

The bark of the tree caatiguà, when dipped in water, imparts a pale red colour, and is chiefly used for dying leather.

MATERIALS FOR A BLACK COLOUR.

To dye cloth black, they make use either of a kind of alfaroba, which I have described

elsewhere to be like the Egyptian tree acacia, of a well-known Paraguayrian herb, or of a rich, black clay. Though cotton will take a black dye, it will not hold it long; consequently the cotton dresses which we wore in Paraguay, became almost of no colour, and the blackness, by degrees, faded away. The Spanish ladies of St. Iago, and the Chiquito Indians have the art of dying cotton with a very lasting black, a secret unknown to every one else.

A NAMELESS FRUIT AFFORDING A GREEN COLOUR.

Walking in a wood on the banks of the Narahage I discovered a shrub, before unknown to me, covered with leaves of such a very bright green that I felt an inclination to taste them. I found them sweeter than sugar, and thought to use them for sweetening the herb of Paraguay. Applauding myself vastly, for what I thought so useful a discovery, I gave a leaf to the Spaniard, my companion, to taste; but he prudently declared, that he should take care not to eat, or even touch that strange plant. The Indian old women were consulted on this affair: they told us that these leaves were used for dying things green, but were very poisonous.

WOODS USED FOR DYING.

Woods, moreover, used for dying various colours, which are brought into Europe from Brazil, Guayana, and other countries of America, are found in that part of Paraguay, which borders on Brazil. The same may be observed with regard to roots, oils, juices, gums, rosins, kernels, &c.

CARDONES, OR CEREI.

To the thistles called tunas, or Indian figs, you may add the *cardones*, or *cerei*, the trunk of which is large, and tall, with a spungy, and brittle pulp. In the place of branches and leaves there grow on them other stalks, both thick, and long, which are thorny on every side, full of juice, and straight upright. They bear white flowers, and oval-shaped fruit larger than a goose's egg, which produce a red colour, and are eaten by the Indians with impunity. In the deserts of Paraguay, I have often traversed immense woods of *cardones*. The honey which bees deposit in them is very famous in Europe. Every part of the cardo is converted into medicinal uses, both by the Europeans, and Americans. There are many species of cardones, of strange, and monstrous forms. Some

creep on the ground, others stand upright. The most remarkable is the large, thorny, Peruvian cereus, which is twenty feet high, and one foot thick. Its trunk has various corners, and channels, as it were, together with knobs, and thorns. The bark is green, and the pulp fleshy, and under it lies a ligneous substance, the pith of which is white, and juicy. It bears but few flowers. If you wish to know more of this cereus, it is to be seen in the gardens of princes.

VARIOUS SPECIES OF THE CARAQUATA.

Many species of this plant are commonly to be met with in Paraguay. I will briefly mention those with which I am best acquainted. The caraquatà guazù, or the great caraquatà, is supported by a short thick root. It consists of about twenty very thick leaves, dentated on both sides, remarkably sharp, and about two feet in length, in the midst of which rises a stalk, like a trunk, five, and often more feet high. The top of it is crowned with yellow flowers. The Indian women spin threads of the fibres of the leaves, as others do of flax, or hemp, and weave them into cords, cloths, and nets. But no time, or art can make these threads perfectly white, nor will they hold any

colour with which they may be dyed. Creditable authors write that in the province of Guayana such beautiful stockings are woven of this same thread, that they are sometimes preferred to silk ones in France for strength, and softness. Another kind of caraquatà, very like the former, is seen in the woods, but it cannot be spun into threads. In the woods of Mbaèverà, the Indian women who inhabit there make thread, and garments, not of the caraquatà, but of the bark of the tree pinô, after it has been properly cleaned: for the webs woven of the thread of this bark, after being exposed for some time to the sun, and frequently sprinkled with water, become beautifully white and will retain any colour with which they are dyed, extremely well. It is much to be lamented that this tree pinô is found in the larger woods only, and is not to be seen in many parts of Paraguay. Another caraquatà of a different shape produces a kind of artichoke, or anana. It bears fruit of a scarlet colour, and has plenty of seed contained in a straight slender stalk. It is surrounded with very large leaves, denticulated like a saw, and pointing towards the ground, in the centre of which travellers find a tolerable supply of very clear water, and with it often quench their thirst in dry deserts, where sometimes not a drop of

water is to be found. Another caraquatà with leaves very like a sword, and armed on both sides with a threatening row of thorns, bears fruit of a pale yellow within and without, full of black seeds, and pregnant with an acidulated, and pleasant juice. But to extricate this fruit from the many thorns, with which the leaves that guard it are armed, without being wounded, is the labour and the difficulty. Of this fruit mixed with sugar a very wholesome drink, and an excellent medicine for various diseases are made. These, and other kinds of caraquatà are of great use to the Americans. Planted around gardens, and the buildings of estates, they, by their thorns, prevent all secret, and improper access, more effectually than any other kind of hedge, and will survive every inclemency of the weather. Their leaves supply the place of flax in making thread, as well as of tiles in covering temporary huts, and their thorns serve for needles. Their leaves, on being pricked, yield a thick juice which washerwomen use for soap, and when boiled on the fire are fit to be eaten. The Indians look upon the various fruits of the caraquatà as food. From their leaves, when scraped with a knife, flows a sweet liquor, which is thickened on the fire, and condensed into sugar. This liquor of the caraquatà, mixed in water with the seeds of

oranges, or lemons, undergoes a vinous fermentation; exposed to the sun it turns to vinegar. By what method, and in what cases, wounds and disorders are healed by the juice of the caraquatà, would be long to tell. A polypodium, preferable in the opinion of physicians to any European one, grows on the caraquatà.

VARIOUS KINDS OF REEDS.

Both in marshy plains, and in the moister woods, you see a great abundance and variety of reeds; some solid, others hollow. Some are as thick as a man's thigh, others scarce equal to his thumb: many which are slenderer than a goose's quill, but full ten yards long, entwine themselves about the neighbouring trees. You commonly meet with reeds of such immense size, that they supply the place of wood in building houses, waggons, and ships, and if cut at proper times would exceed it in hardness and durability. Some made very large flaggons, for the purpose of holding wine on a journey, of these reeds, and they answered better than glass, because less fragile. As various kinds of reeds grow in various parts of the province, the Indians ingeniously conjecture the name and country of their savage foes who have been travelling the same way, from the reed of an arrow which they may have chanced

to see on the road. We have often crossed woods of wide extent bristling with continual reeds, and have been obliged to pass the night there even, always sleepless, always anxious; for as reeds generally delight in a marshy soil, they are seminaries and abodes of tykes, snakes, gnats and other insects, which are always noisy and stinging, and never spare either the blood or ears of strangers; especially on an impending calm. If a violent wind comes on, the fire at which you sit, being thereby scattered up and down, will set fire to the reeds, which are covered with leaves, and you will be burnt; for no means of extinguishing the flames are at hand, and there are no opportunities of escape. Those reeds which the Germans call Spanish canes, and the Spaniards Indian ones, and which are used for walking-sticks, never grow in Paraguay, though neither rare nor precious in the provinces of North America.

THE SUGAR-CANE.

The sugar-cane flourishes exceedingly in the hotter territories towards the north, if properly cultivated. In the month of August, at the end of winter that is, slips of canes, about one or two feet long, are placed sloping in furrows, at equal distances, and properly ploughed. These gradually rot under ground, and from them a

new germ arises, which grows to the height of eight feet, and is cut down in the space of about two months, being perfectly ripe. The longer they are left in the field, the sweeter and thicker becomes their juice, which is afterwards expressed by various methods and machines in America. In Paraguay, the canes, after being stripped of their leaves, are cut into pieces a foot and a half in length. These are thrust by the hand into two large cylinders of very hard wood, which are turned round by two oxen with the help of a great wooden wheel. The juice squeezed out by the tight compression of the cylinders, falls into a boat or cup placed beneath. It is then boiled in a brass pan, more or less, according to the various uses for which the sweet liquor is intended; for if it be used in the same manner as honey, which serves either for food or drink, it is less thickened on the fire, and kept in skins, at the bottom of which, after the liquid part is consumed, you find white crystallized stones, made of the coagulated sugar, which is commonly called the pure and natural sugar-candy; for that yellow candied sugar so full of threads, which is sold in shops, appears to be artificial. But if the liquor expressed from the canes be intended for making sugar, it must be boiled for a long time, and brought to a thick mass. The oftener this is

strained through an earthen pan perforated at the bottom, and the longer it is exposed to the sun, the more thoroughly it is purged of the dregs, which flow off into a vessel placed beneath the pan, and the whiter and better sugar it becomes. Of these dregs the Spaniards make either coarser sugar, or aqua vitæ, by liquefying it at the fire drop by drop. For the same purpose others use the canes that have been pressed by the cylinders, but have not had all their juice entirely squeezed out. Observe, moveover, that the pans in which that sweet liquor is daily exposed to the sun are carefully covered with fresh moist mud. All the sugar prepared in Paraguay, and the neighbouring Brazil, has the appearance of wheat flour. That alone is used by the Portugueze; it is transported from Lisbon, in ships, to different places, and made as hard as a stone by aid of chalk, or bull's blood. As the industry of the inhabitants in Paraguay by no means answers to the fertility of the soil, the sugar made there is rarely sufficient for that province, so that no one thinks of exporting any from thence. On the contrary, from the exquisite cultivation of the sugar cane, Brazil derives immense wealth from Europe; it is the chief strength of the Portugueze trade, and a perpetual source of

riches. The sugar cane differs from the common reed no otherwise than in having more joints, and a smaller space between each. It is adorned with beautifully green and very large leaves, especially at the top. It is about four inches thick. Though the plant is seven or eight feet high, great part of it towards the top is thrown away, being devoid of juice, and very full of leaves. Sugar canes like a rich and moist soil, nor will they grow much on hills, though well watered. More earth must be heaped on the sugar cane after it has been lately planted in the summer, less in the winter, that it may not bud too much; for the more leaves it bears the less juice it will yield. Weeds, which suck up the moisture of the earth, must be carefully extirpated. Moderate frosts are useful to the full grown canes, because they thicken the sweet liquor; immoderate ones do harm, because they exhaust it all. Ants, which are destructive to the young canes, must be carefully kept away. Many other arts, proper to be used in the rearing and expression of canes, and the converting of them into sugar, I choose to omit for the sake of brevity. I have briefly described the principal ones, that Europeans may be made thoroughly acquainted with the origin of sugar, which they know so well how to consume, and cease to wonder that these reedy

sweets, so laboriously prepared in America, should often be sold at such an extravagant price in Europe.

BEES' HONEY.

Throughout the whole of Paraguay you see none of those beehives the keeping of which is so troublesome in Europe, because the various species of bees deposit their excellent and copious honey either in hollow trees, in the caverns of the earth, or in the open plain; especially in those territories which enjoy a mild climate, and are near to flowery plains. Honey differs both in name and taste according to the different bees that produce it, and the different times and places in which it is produced. That which is concealed under ground the Abipones call *nahérek*. In some places it is rather acid, in others very sweet. A quantity sufficient to fill many jugs is often dug out of one cave. That which is taken at the beginning of spring from the tops of shrubs or high grass is called by the Spaniards *lechiguana*. The materials of which the cells of this honey consist are very like blotting-paper, and are often of such extent and circumference that you can hardly embrace them with both arms. The honeycombs which certain wasps build in Europe are constructed

in much the same way. The excellence of the lechiguana honey you may ascribe to its being made of the first spring flowers, and if it remains untouched for some months, and escapes the eyes and hands of passers by, it hardens of itself, like sugar, which it excels in sweetness. Moreover it has no admixture of wax. Though various kinds of honey are found under the earth, and in the plain, yet the principal storehouses of the bees are the hollow trunks of lofty trees. The Spaniards of St. Iago prefer to every other kind that found on the cardones. With the Guaranies, and all just estimators, the first place is given to the *eÿrobáña*, the sweetest and most transparent of all honey, which, when poured into a glass, could not be distinguished from water. The same honey, if found on the fragrant wood of the tree ybirapayè is then decidedly the best, and excels all other honey as the sun does the lesser stars. In Paraguay, in the winter months the Abipones think honey extremely unwholesome, and carefully abstain from eating it. The Spaniards of St. Iago go out in crowds to seek honey and wax in distant woods; and after whitening it with immense labour in the sun, sell it to the people of Peru and Chili, with hardly moderate profits. To discover and rifle the beehives concealed in the woods is a

matter of little difficulty to the Abipones, who, when the sky is clear, and the sun bright, ride out on horseback into the country. Being possessed of wonderfully quick eyesight, they perceive the bees flying about, and leaving their horse at the bank of a river, pursue them on foot till they see what tree they enter: this they climb with all the agility of apes, open a hole by way of a door, and as a mark of the hive, take out the honey and wax into a leathern bag, and carry it home, where their friends, wives, and children soon consume these adventitious sweets, either by eating them like ambrosia, or drinking them like nectar. But if a general drinking-party be appointed on any occasion, the honey they bring is mixed with cold water, and stirred for a little while with a stick; when, without addition of any other ferment, it effervesces, froths, and becomes wine in the space of some hours, and taken even in small quantities intoxicates the Indians like very pure wine: for we have found two or three cups sufficient to upset their naturally imbecile minds. Wax is scarce ever used amongst the Indians: for the fire, which is always kept alive on the floor of the hut, serves to dress the food by day, and supplies the place of a candle by night.

SALT.

From honey let us proceed to salt, which is in great request both amongst the savages and almost all beasts, though they are scarce ever able to procure it: for notwithstanding that some parts of Paraguay abound in salt either natural, or artificial, yet none of either kind can be obtained throughout immense tracts of land, unless it be brought at a great expense from other places. All the Guarany towns are destitute of chalk, and salt, both of which are forced to be conveyed in ships, or waggons, from the remote colonies of the Spaniards, are often purchased at an exorbitant price, often not to be procured. In the Cordoban territories, and elsewhere, the lakes which have been exhausted by a long drought do indeed afford coagulated salt; but during time of drought it is very difficult to reach those lakes, as the plains, through which you must pass, deny water both to the carriers, and to the oxen, by whom the salt is conveyed in waggons to the cities. In rainy seasons, when those lakes are full, no salt is coagulated, which being frequently the case, salt is in consequence often scarce and dear. In many places under the jurisdiction of the cities Asumpcion, and St. Iago, nitre collected in the plains, or salt water boiled

in small pans, is converted into salt. At the town of Concepcion the salt boiled in the little town of Sta. Lucia was sometimes too bitter to be eaten: that salt made in the Indian town Lambare, and in Cochinoco where it borders on Peru, is much esteemed, because it is hard as a stone, very white, and fit for medicinal purposes. The people of Buenos-Ayres sometimes convey salt in ships by the South Sea, sometimes in waggons by land from the lakes, where there is an immense accumulation of native salt, and of snow. These lakes, as they are situated towards the straits of Magellan, many days' journey from the city, can never be reached without much expense, and seldom without some danger. Great troops of Spaniards were often cruelly murdered on the way by the southern savages, who scarce left one alive to announce the massacre to the city. On considering these difficulties you will not much wonder that salt is generally scarce in Paraguay, and often not to be procured. The Guaranies eat their meat and all their other provisions without a grain of salt; but a single spoonful was given on Sundays by the free bounty of the priest, to every father of a family, to last the whole week: yet even this little portion was expensive to the towns, of which some contained a thousand inhabitants, others seven

or eight hundred. For as an arroba (a Spanish weight of twenty-five pounds) of salt often cost four crowns, or eight Austrian florens, a pound was worth about twenty of our cruitzers. The savages who live in hidden wilds generally eat their food without salt, as there are no salt-pits there; and this is, in my opinion, the reason that so many of them are afflicted with cutaneous disorders. Others burn a shrub which the Spaniards call *la vidriera*, the ashes of which they used instead of salt, to season their meat with and to prepare medicines.

CORO.

This plant closely resembles tobacco in its leaf, its pungency, and property of exciting saliva.

When should I ever have done writing, were I to mention the names of all the other shrubs and plants? In certain Guarany towns you find immense woods of rosemary, rue, artemisia or mugwort, golden-rod, mint, and wormwood. I was acquainted with three different kinds of sage, varying in appearance, but endued with the same virtues. That which the Spaniards call royal sage is scarce, because seldom cultivated. Borage, plantane, mallows, bastard marjoram, garden-nasturtium, bugloss, vervain, fumitory, purslain, liquorice, and three kinds of

pepper, that is, common pepper, which the Guaranies call gỹ; cumbarỹ, which has a small grain, but is remarkably pungent; and aji, which we call Turkish pepper: all these, which grow in Europe, are seen here in some places; but not every where. Ginger grows abundantly when planted. Throughout many tracts of land I could discover none of the nettles of our country. Liberal nature has bestowed on the soil of Paraguay innumerable herbs useful to physicians, such as contrayerva, &c. It may be proper to give some little account of the grains which compose the chief part of the support of the Indians.

MAIZE.

That grain, which the Spaniards call *mayz*, is the principal provisions of the Americans. It bears grains of divers colours. The Guaranies sow various kinds of it. Those best known to me are the abati hatâ, composed of very hard grains, the abati morotî, which consists of very soft and white ones, the abati miîi, which ripens in one month, but has very small dwarfish grains, and bisingallo, the most famous of all, the grains of which are angular and pointed: when pounded in a wooden mortar, they yield a sweet and very wholesome flour, and drunk with water, either alone, or mixed with honey or

sugar, quickly allay hunger and the most burning thirst. This flour is the delicious food of the soldiers of St. Iago, when they pursue the fugitive savages, and by its aid they often accomplish long and arduous excursions in a few days, without ever being obliged to light a fire to cook their victuals. This flour was likewise a great relief to myself in calamitous journeys under a burning sun. Of the grains of each kind of maize, either whole, or pounded in amortar, the Indian women make various sorts of food, and even a thin bread, dressed on the hot coals, which, however, hunger alone would render palatable to a European. The Spanish ladies, of maize flour, carefully strained through a sieve, make a white bread, which, while new, has an agreeable flavour, and is to my taste preferable to wheaten bread. The grains of maize, when pounded in a mortar, and sprinkled with water, ferment in a few hours, and frequently afford the lower orders of Spaniards, and still oftener certain Indians, a fermented liquor called *chicha* or *aloja*. The Abipones, who abound in honey and the algaroba, though very fond of maize, never use it in that manner. Many and great are the advantages of maize, for it does not require a very rich soil. One grain often yields the cultivator more than a thousand-fold. The ears, when young and milky, are much relished both by Eu-

ropeans and Americans, either roasted or boiled with meat. The Indians find this grain, however prepared, highly useful in strengthening the body, increasing the blood, and lengthening life. Neither could we discover any thing better for fattening hens and other animals.

BATATAS.*

Amongst articles of food used by the Indians, a high place is given to certain roots which the Spaniards call *batatas*, and the Germans earth-apples *(erdäpfel)*. It would be superfluous to describe with prolixity a thing so commonly seen. Those of Paraguay are decidedly superior to the German ones in size and flavour. These roots, or rather bulbs, are sometimes white, sometimes red, and sometimes yellow, in Paraguay. In my opinion the red ones are by far the worst, and the yellow the best of all.

THE MANDUBI.

The mandubi, a fruit which Europe may envy America the possession of, resembles an almond in oiliness, sweetness, and, with the exception of the bark, in appearance. It grows under ground from a very beautiful plant about two feet high, which has a square hairy stalk of a

* Potatoes.

reddish green colour. Its slender boughs are covered with four small leaves of a bright green on one side, and a whitish hue on the other, and are clothed with tender down. At the beginning of the little boughs grow small yellow flowers with red edges, hanging by a short stem, and surrounded by three leaflets. The roots of this plant are short, slender, and tortuous, and on them hang yellow oblong pods with a soft rind. Each of these pods contains either one or two kernels, (for there are various species of the mandubi,) beautifully covered with a red skin, and inclosing a very white and very rich pulp. These kernels, slightly fried or roasted, are much liked even by Europeans. The oil expressed from them is used instead of oil of olives, to which indeed it is superior, on lettuce; and many eat it with food in the place of butter or beef fat. I have often wished that this excellent fruit grew in Europe, where it certainly would be useful in many ways.

VARIOUS KINDS OF VEGETABLES.

Besides lentils, beans, fasels, and other kinds of vegetables, there is an infinite variety of melons, gourds, and cucumbers, brought from England, Italy, Germany, and Africa, into Paraguay, which, dressed in various ways, serve excellently both to fill the stomach and delight

the palate. The curuguà, a kind of gourd, is of great size. Hanging from its stalk, it creeps like ivy along the neighbouring hedges and trees. This gourd is a by no means unpleasant dish, and a celebrated medicine for persons afflicted with the tertian ague. After being kept at home for many months, it fills the room with a delightful fragrance, which virtue the seeds likewise possess. Melons of almost too great sweetness grow every where here, but, unless plucked as soon as ripe, immediately get bitter and are filled with most offensive bugs. Water-melons are very plentiful and of great size. The soil of St. Iago del Estero, which is sandy, produces exceedingly sweet and enormously large melons. Their pulp, which is sometimes red, sometimes yellow, and always cold, greatly refreshes the mouth when parched with heat, and the other parts of the body, without injuring the stomach. They will keep great part of a year, if suspended in any open airy place. Rainy weather is extremely injurious to the young melons, for they absorb so much water that they either burst before they are ripe, or when ripe quickly putrify.

LETTUCE.

Lettuce grows in the winter months, if rightly cultivated, but very seldom in the summer, un-

less it be planted on the banks of rivers; for in a garden, by reason of the excessive heat of the sun, it soon blossoms, and turns to seed. European rapes grow successfully the first year they are planted, but degenerate to black and very pungent radishes the next.

THE RADISH.

Indeed the soil of Paraguay seems peculiarly favourable to radishes, which grow every where to an amazing size, and are very pernicious to wheat, by choking up the fields like tares.

MUSTARD SEED.

Mustard seed, a wholesome seasoning for food, is always to be seen in the more careful gardens.

NASTURTIUM.

The European nasturtium is almost unknown to the whole of Paraguay; though the garden, or water-nasturtium, grows spontaneously in moist places.

SAFFRON.

The European saffron is found in no part of Paraguay. The American, which is saffron in name and appearance only, is not used for seasoning food, but for dying things of a yellow colour.

ASPARAGUS.

Asparagus grows wild in the plains, but is very bitter, and slenderer than a thread; if cultivated in gardens, it would become quite gigantic.

ONIONS AND GARLICK.

Onions and garlick are diligently cultivated with great care and expense by the Spaniards, and are even eaten raw with avidity by hungry persons.

FUNGUSES.

Various funguses are found both in the woods and plains, but no one would venture either to touch or taste them. Verengena, called by the Latins melongena, tomates, which the Germans call apples of Paradise, and other condiments of this kind, better known to Spaniards than Germans, are frequently seen in gardens and at table. The Indians like sweet things, and detest radishes, mustard-seed, garden-nasturtium, lettuces sprinkled with vinegar, in short, every thing acrid, acid, or bitter. The Abipones, who, leading a vagrant life, never take the pains to sow, nor find occasion to reap, subsist, like birds and beasts, on whatever their predatory habits supply, or liberal nature gratuitously

offers to hunters in the plains, woods, rivers, and lakes. If the surface of the earth yields no food, they seek under the earth, or the waters, for esculent roots, of which they call some neeyeka, others hakamìk, and others again leèkate. There is also a kind of very small bean, which they call nauvirgila, and which is commonly found in the woods. These beans, when boiled, though not very savoury to the palate, serve in some measure to fill the bellies of the Indians.

WHEAT.

The soil of Paraguay, particularly in the territories of Buenos-Ayres, Monte-Video, and St. Iago of the Tucumans, is extremely fruitful of wheat. It is nèvertheless no less true than surprizing that greatest part of the Spanish nation never taste wheaten bread, to avoid the difficulty of sowing and grinding this grain: for you never see any thing like a water-mill here. The mill-stone is turned about by horses, in some places by the wind. I saw but two windmills of this kind, and those were in the city of Buenos-Ayres. European wheat differs from that of Paraguay, the latter having a very short stalk, but a larger ear, containing larger grains. The Guaranies cut off the ears alone with a common knife, and leave the stalks in the field,

where they are afterwards burnt as they stand, as the ashes fertilize the soil better than any other manure. In every Guarany town as much wheat is sown, as is thought sufficient for one year. The grains of wheat are pressed out of the ear by the feet of horses, one or two hundred of which are driven round an area surrounded by hedges, wherein the ears are strewed on the floor.

OATS.

Oats are not even known by name in Paraguay.

PETRIFICATION OF WOOD AND HORN.

Immense pieces of petrified wood are sometimes seen in the river Parana. Cows' horns also, which are mottled with various colours like marble, and when rubbed against steel emit fire like flint, are often transformed in this way.

HOT SPRINGS.

In none of those parts of Paraguay which I have myself visited did I ever find any mineral, or medicinal waters. But Father Joseph Sanchez Labrador discovered, in his journeys through the towns of the Chiquitos, that two places contained salubrious springs, which I shall describe

in his own words. | "Not far from the town of St. Iago is a hot spring, surrounded on all sides by woods. It is wide, about three feet deep, and emits a sound like that of a boiling kettle, occasioned by the water bubbling up from the bottom. On dipping your foot into it you feel a violent heat, which in a short time becomes tolerable. Little fishes swim in these waters, without however doing them any injury; but their sulphureous odour renders them very disagreeable. The banks of the fountain are surrounded by lime-stones. The farther the water recedes from the spring, the colder it becomes, forming a river, which, about three leagues beyond the town of Santissimo Corazon de Jesu, loses itself amid extensive palm groves. Many persons who had been long, and grievously ill, derived much benefit from these springs. In sight of the town of St. Juan, at the borders of the rocks, rises another small fountain, bubbling with the heat of its waters; it forms a lake in the neighbouring vale, which gives birth to another river. That water is hot at its source, but gradually cools as it goes along, and is drunk by the Chiquitos: but it is of an unpleasant taste, and not very wholesome. Indeed the inferior fruitfulness of the women of that town is ascribed by many to this water. The same complaint is made by the inhabitants

of the town of St. Iago. From which I conclude that these waters are beneficial to sick persons bathing in them, but not proper to be drunk."

Of metals, or rather of the total absence of all metals, I have discoursed elsewhere. Wild animals, trees, and plants I have described with a hasty touch, like one speeding upon a journey. Let me hasten therefore to the Abipones, the chief subject of my pen, lest I appear to dwell too long upon the introductory part of my work.

END OF VOL. I.

London: Printed by C. Roworth,
Bell-Yard, Temple-Bar.

00083812

Digitized with financial assistance from the
Government of Maharashtra
on 04 April, 2016